# Service Manual

## International

# Vista 2 Stacking Platform

BRAUN VISTA 2 SERIES 34281

## Public Use
### Wheelchair Lifts

## Series AB

# 26" FTG

THE BRAUN CORPORATION®

www.braunability.com/international ISO 9001:2008

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37838
December
2012

Original Instructions

CE

## Congratulations

We at The Braun Corporation wish to express our fullest appreciation on your new purchase. With you in mind, our skilled craftsmen have designed and assembled the finest lift available.

This manual provides maintenance and service-related material. Braun Vista 2 Series™ lifts are built for dependability and will provide years of pleasure and independence as long as the lift is properly maintained and operated by an instructed person.

Sincerely,
THE BRAUN CORPORATION

Ralph W. Braun
Chief Executive Officer

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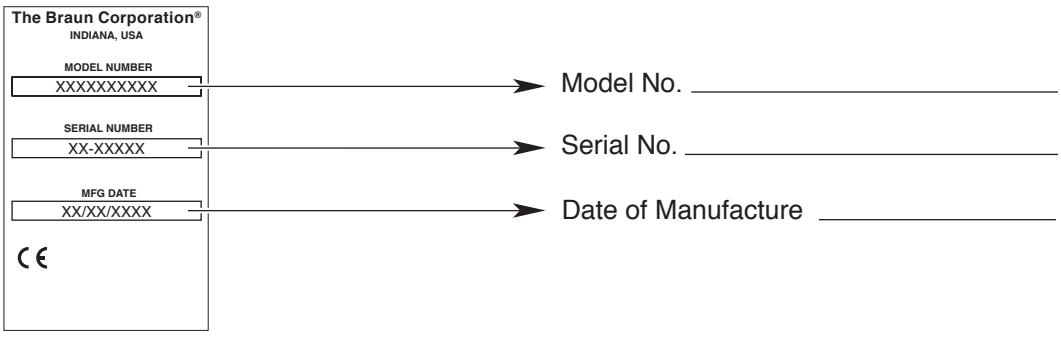
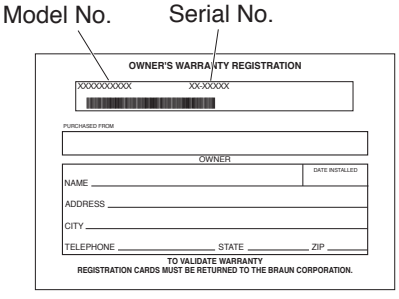
## Warranty

Consult your local Braun dealer regarding warranty policy.

www.braunlift.com/international




Sample Serial No./Series No. Identification Tag




Sample Warranty/Registration Card

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## Document Cross Reference

Owner Manual 36543

# Service Safety Precautions

## Safety Symbols

**SAFETY FIRST!** Know That....

A The information contained in this manual and supplements (if included), is provided for your use and safety. Familiarity with proper installation, operation, maintenance and service procedures is necessary to ensure safe, troublefree lift operation. Safety precautions are provided to identify potentially hazardous situations and provide instruction on how to avoid them.

B

**⚠WARNING**

**This symbol indicates important safety information regarding a potentially hazardous situation that could result in serious bodily injury and/or property damage.**

C

**⚠CAUTION**

**This symbol indicates important information regarding how to avoid a hazardous situation that could result in minor personal injury or property damage.**

D **NOTICE** Additional information provided to help clarify or detail a specific subject.

E

This symbol indicates that there are dangerous high voltages present inside the enclosure of this product. To reduce the risk of fire or electric shock, do not attempt to open the enclosure or gain access to areas where you are not instructed to do so. Refer servicing to qualified service personel only.

F

This symbol indicates that a condition where damage to the equipment resulting injury could occur if operational procedures are not followed. To reduce the risk of damage or injury, refer to accompanying documents, follow all steps or procedures as instructed.

G

This symbol indicates that a condition where injury or damage could occur if contact is made with the hot surface.

H

This symbol indicates an area to avoid bodily contact to prevent injury.

I

This symbol indicates the presence of high pressure hydraulic hoses. Use appropriate personal protective equipment when working on hydraulic system.

J

This symbol indicates the presence of a fire hazard. Avoid open flames or sparks when working with flammable materials to prevent injury or damage.

These symbols will appear throughout this manual as well as on the labels posted on your lift.
**Recognize the seriousness of this information.**

# Service Safety Precautions

## Service Safety Precautions

**⚠WARNING**

**If maintenance or repair procedures cannot be completed exactly as provided in this manual or if the instructions are not fully understood, contact The Braun Corporation immediately. Failure to do so may result in serious bodily injury and/or property damage.**

**⚠WARNING** Read this manual, supplement(s) and operating instructions decals before performing operation or service procedures.

**⚠WARNING** Use appropriate personal protective equipment when servicing the lift.

**⚠WARNING** Check for obstructions such as gas lines, wires, exhaust, etc. before drilling or cutting on vehicle.

**⚠WARNING** Route all cables clear of exhaust system, other hot areas, moving parts, wet areas, etc.

**⚠WARNING** Risk of electrical shock or fire! Use extra care when making electrical connections. Connect and secure as outlined in Installation Instructions and Wiring Diagrams.

**⚠WARNING** Adjust platform angle and floor level positioning of bridge plate before operating lift with passenger.

**⚠WARNING** Maintenance and repairs must be performed only by authorized service personnel.

**⚠WARNING** Perform maintenance and lubrication procedures exactly as outlined in the Maintenance and Lubrication Schedule contained in this manual.

**⚠WARNING** Disconnect the power cable at the battery prior to servicing.

**⚠WARNING** Never modify (alter) a Braun Corporation lift.

**⚠WARNING** Replacement parts must be Braun authorized replacements.

**⚠WARNING** Never install screws or fasteners (other than factory equipped).

**⚠WARNING** Whenever replacing a hydraulic cylinder or seals, lower platform fully.

**⚠WARNING** Failure to follow these safety precautions may result in serious bodily injury and/or property damage.

# Specifications

The lift must be installed, operated, and maintained as detailed in applicable manuals. Any use of equipment other than instructed in this manual is prohibited.

The 363kg (800 lb.) lift capacity Vista-2 series lifts have completed 15,600 cycles with a 363kg load and a static load test with a 1089kg (2400 lb.) load.

The specifications below reflect CE standards. Lift meet or exceed these requirements.

**Operating Temperature**

This equipment will operate in its intended ambient at a minimum between -30ºC and +65ºC.

**Relative Humidity**

This equipment will operate correctly within an environment at 50% RH, at 40ºC.

**Altitude**

This equipment will operate correctly up to 1000m above mean sea level.

**Sound Pressure Level**

The emission sound pressure level at the operator's position is expected not to exceed 70 db(A).

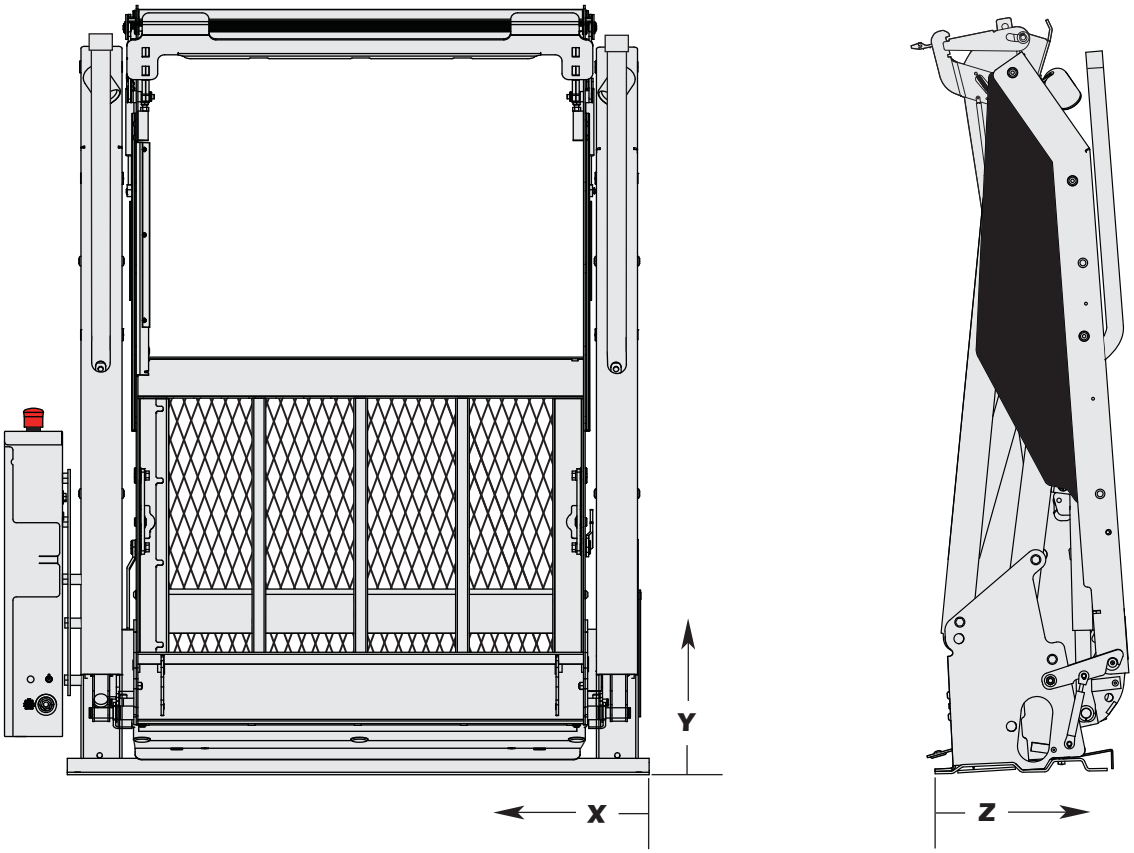
**Transportation and Storage**

This equipment will withstand, or has been protected against, transportation and storage temperatures of -25ºC to +55ºC, and for short periods of up to +70ºC.

The lift has been packaged to prevent damage from the effects of normal humidity, vibration, and shock.

| Lift Model | Maximum Load Capacity | Power Requirement | Lift Weight |
|---|---|---|---|
| VL995IB2740-2 | 363kg (800lbs) | 12 VDC | 138kg (305lbs) |

# Center of Gravity

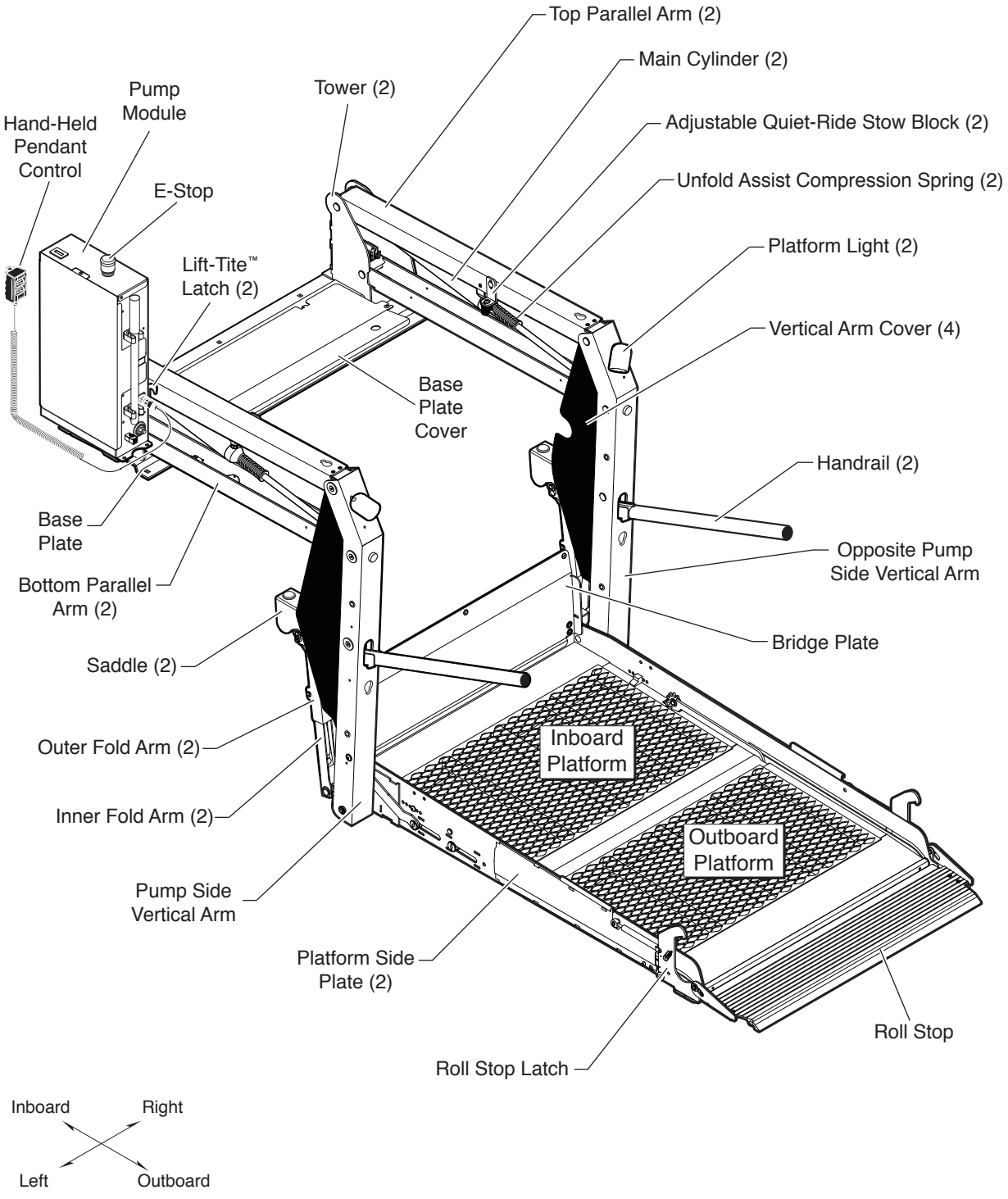



Center of Gravity is the intersection of X, Y, and Z.

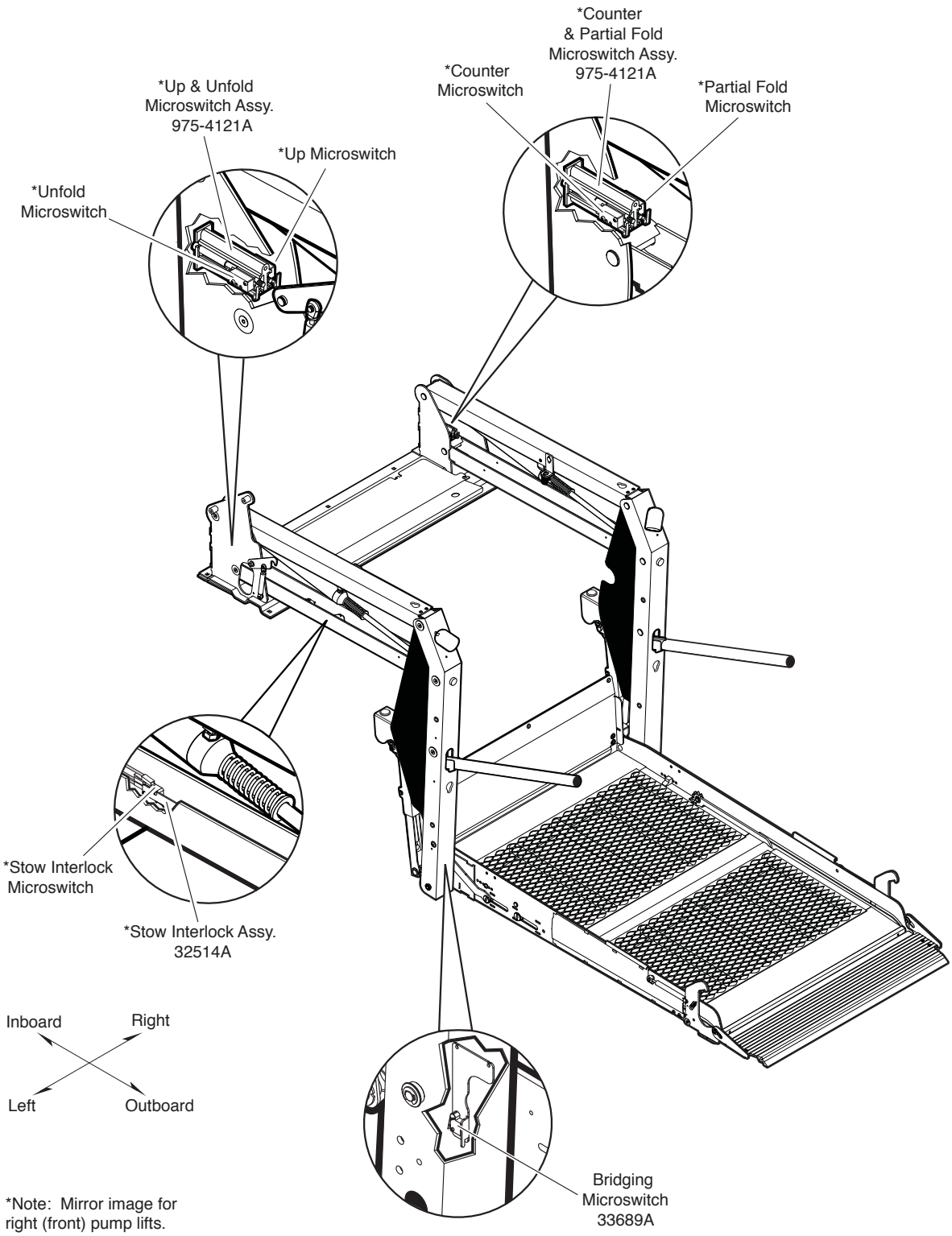
Notice: X must be measured from opposite pump side as shown.

| Lift Model | X (cm) | Y (cm) | Z (cm) |
|---|---|---|---|
| VL995IB2740-2 | 56.20 | 41.02 | 18.46 |

# Lift Terminology



# Switch and Sensor Locations




*Note: Mirror image for right (front) pump lifts.

# Platform Fold Pressure Adjustment

1. See Tower 4 (Fold) Switch Adjustment in the Tower Microswitch Adjustment section for proper microswitch setting before adjusting the platform fold pressure.
2. Position the platform at the floor level loading position.
3. Loosen the hex nut on the adjustment screw (do not remove hex nut).
4. Turn the adjustment screw counter clockwise until the platform does not fold when the Fold button is pressed.
5. Turn the adjustment screw clockwise in 1/4 turn increments and press the Fold button until the platform folds completely. Note: Return the platform to floor level position after each attempt to fold the platform.
6. Turn the adjustment screw an additional 1/8 turn after the platform folds successfully.
7. Tighten the hex nut without moving the adjustment screw.
8. Verify the platform will not stow while occupied.

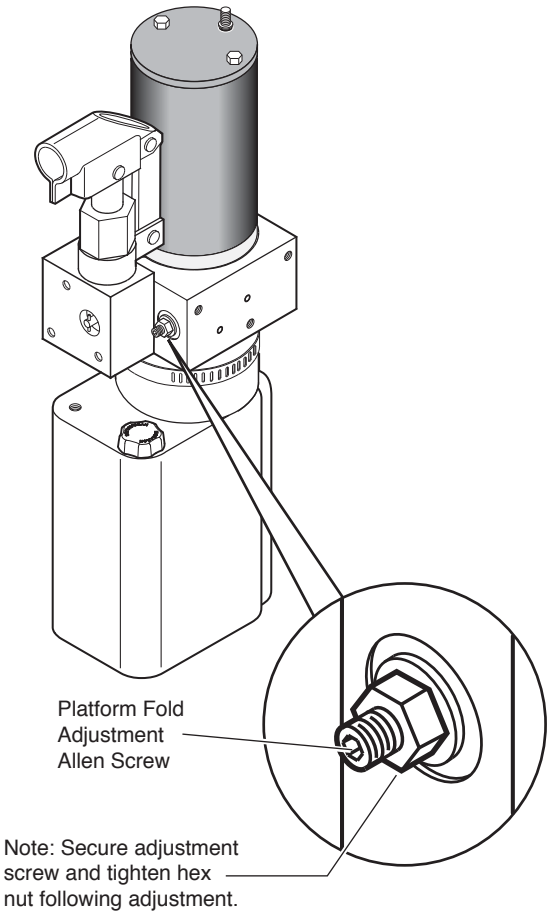
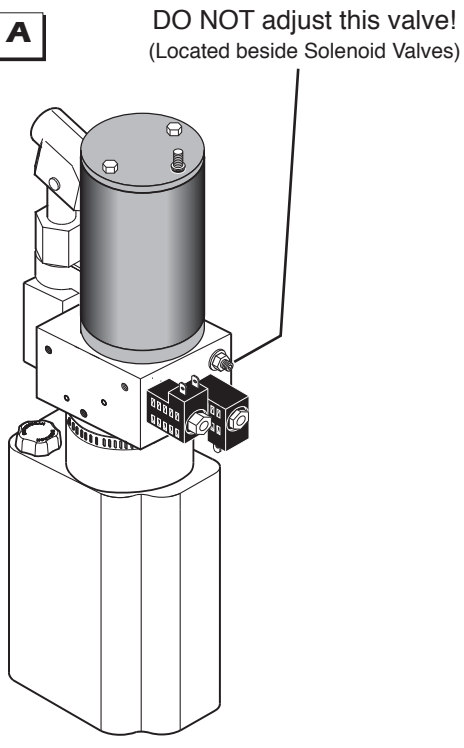



**Figure A**



# Platform Angle Adjustment

Lowering Sequence Requirements

1. The outboard end (toe) of the platform must contact the ground first to ensure the spring-loaded outer barrier unfolds fully. See Figure B.

2. The inboard end (heel) of the platform must lower fully (vertical arms must contact ground when fully lowered). See Figure B.

The angle of the platform at ground level directly affects the angle of the platform when positioned at floor level.

Raise the platform to floor level. Note the angle of the platform.

The platform at floor level should have a slight upward angle as shown in Figure C.

Adjust platform angle as detailed below.

**Figure B**

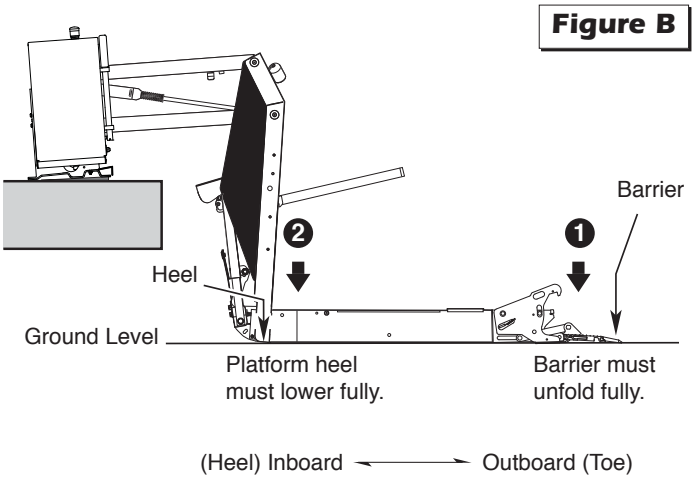
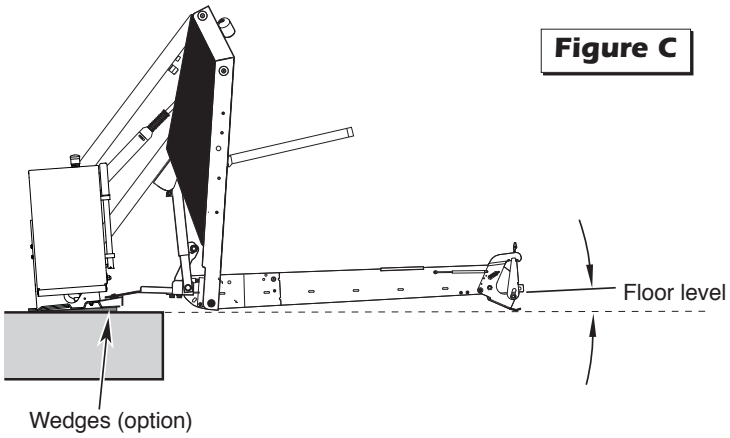



**Figure C**




**Adjustment Procedure:**

Platform angle adjustment Allen screws are provided on each side of the platform (see photo at right).

Turn adjustment screws clockwise to raise the outboard end of the platform. Turn adjustment screws counterclockwise to lower the outboard end of the platform.

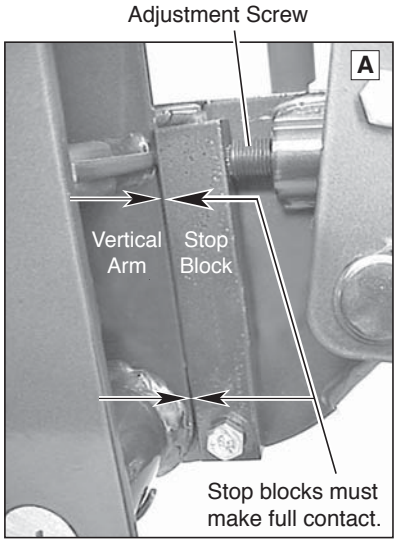
Both adjustment screws must be adjusted equally. Apply thread locker to adjustment screws following adjustment.

Platform Stop Blocks: When adjusting platform angle, ensure both stop blocks are making full contact with the vertical arms (see photo at right).

**Floor Level Adjustment:**

Following platform angle adjustment, set floor level positioning as detailed in Tower Microswitch Adjustment.

Check platform angle again after performing Tower Microswitch Adjustment procedures.



# Tower Microswitch Adjustment

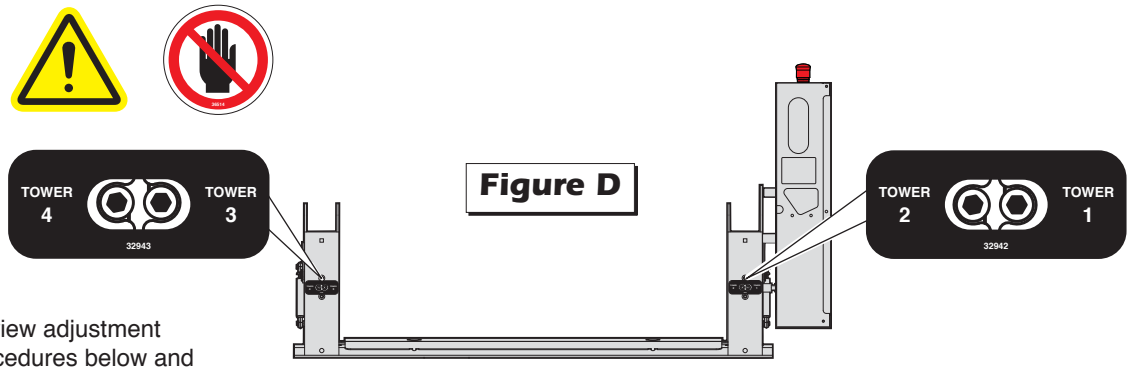



**Figure D**

Review adjustment procedures below and adjust as needed only.

**Tower 1 (Unfold) Switch Adjustment**
Floor Position from Stow

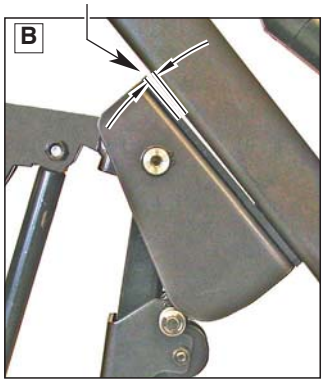
1. Position platform at the fully stowed position using the manual hand pump or pendant control.
2. Turn switch adjustment screw clockwise 3 full turns.
3. Press pendant UNFOLD switch (continue pressing switch until platform stops unfolding).
4. When platform stops unfolding, turn switch adjustment screw counterclockwise while pressing the pendant UNFOLD switch. Platform position will change. Repeat adjustment until criteria below is met.

Proper Adjustment Criteria:
- Bridge plate should just rest on base plate cover. See Photo C.
- Should be an approximate 3 mm clearance between outboard end of rotating pivot slide arm saddle and the lower parallel arm. See Photo B.

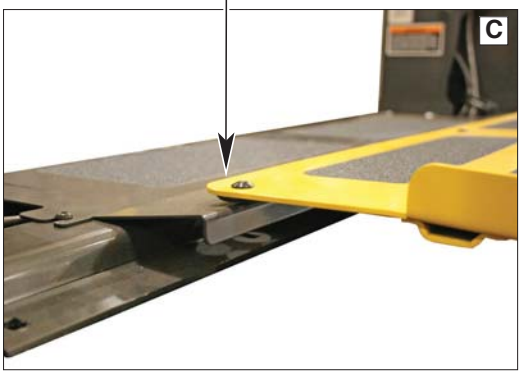
**Tower 2 (Up) Switch Adjustment**
Floor Position from Below Floor

1. Lower platform a minimum of 15.25 cm below floor level position using the manual hand pump or pendant control.
2. Turn switch adjustment screw counterclockwise 3 full turns.
3. Press pendant UP switch (continue pressing switch until platform stops).
4. When platform stops, turn switch adjustment screw clockwise while pressing the pendant UP switch. Platform position will change. Adjust platform to meet criteria listed for Tower 1 Switch "Proper Adjustment Criteria".

3 mm




Bridge plate should rest on base plate cover.



# Tower Microswitch Adjustment

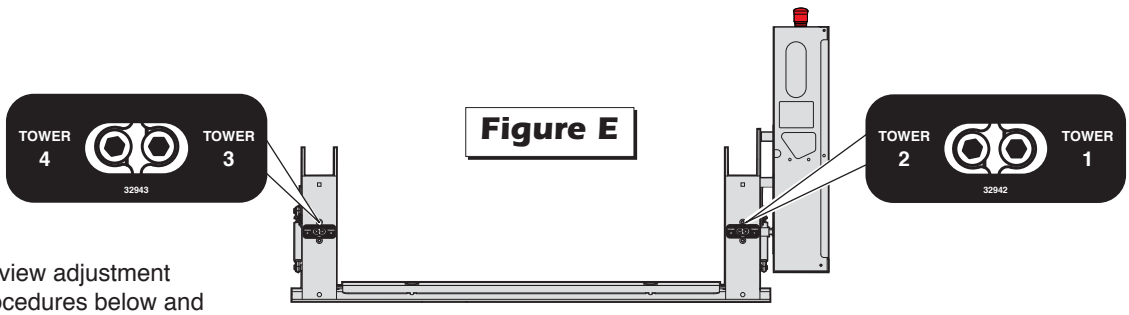



**Figure E**

Review adjustment procedures below and adjust as needed only.

**Tower 3 (Count) Switch Adjustment**
Cycle Counter Switch

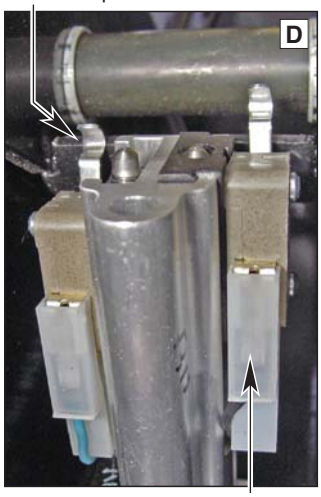
1. Position platform approximately 25 mm below floor level position using the pendant control.
2. View the Tower 3 microswitch inside the lift tower (see Photo D). Turn switch adjustment screw counterclockwise until microswitch no longer contacts the activation plate.
3. Observe the cycle count number on the LCD display. Slowly turn switch adjustment screw clockwise until the microswitch activates (clicks) and the number on the cycle counter LCD has changed.

**Tower 4 (Fold) Switch Adjustment**
Partial Fold

1. Position platform at 45˚ angle using the manual hand pump or pendant control.
2. View the Tower 4 microswitch inside the lift tower (see Photo D). Turn the switch adjustment screw in or out as needed until the radius of the microswitch blade rides on the apex of the activation plate.
3. Verify proper adjustment. Criteria below must be met.

Proper Adjustment Criteria:
- Apply pressure (push down) on outboard end of platform by pressing the hand pendant FOLD switch. The platform should not fold (stow) with light pressure applied.
- When folding fully, the platform should stow tightly (snug with stow blocks).

Radius of Tower 4 microswitch blade activated by apex of activation plate.




Tower 3 Microswitch

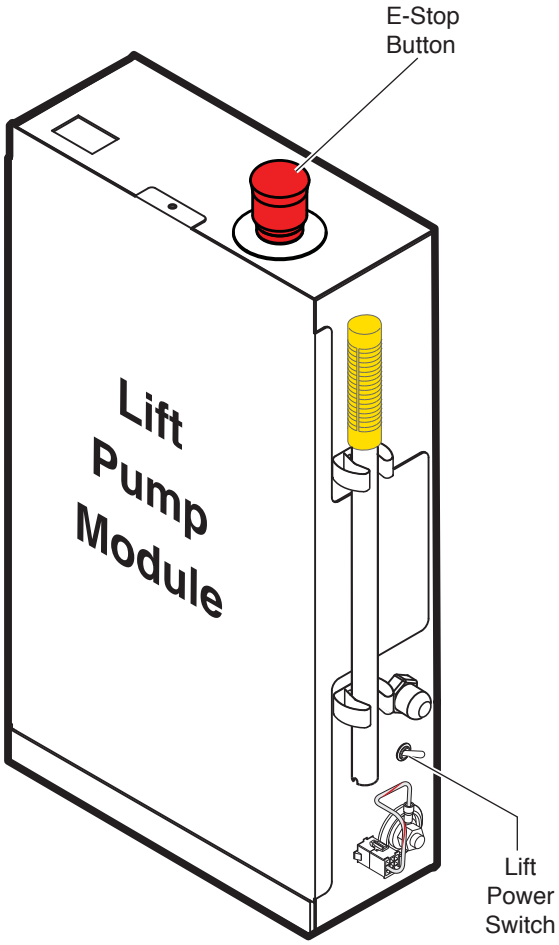
Platform Angle Adjustment: Check platform angle after Tower Microswitch Adjustment procedures.

Platform Stop Blocks: Ensure both stop blocks are making full contact with the vertical arms.

**⚠WARNING**

**Improper microswitch adjustment may result in serious bodily injury and/or property damage.**

# Emergency Stop (E-Stop) Operating Instructions




To Activate E-Stop:

Push E-Stop button down.

To Reset E-Stop:

1. Turn lift power OFF.
2. Pull E-Stop button up.
3. Turn lift power ON.

# Static and Dynamic Tests

**Compatibility between the lift and the vehicle**

The installer shall confirm the compatibility between the lift and the vehicle.

**Static Test**

**Deformation**

The unladen platform is positioned mid-way between ground level and vehicle floor level and measurements are taken of the height of the platform and its angular attitude relative to the vehicle floor.

A load of 454 kg is applied to the platform and subsequently removed.

By repeating measurements of the height and attitude of the platform, verify that no permanent deformation has occurred in any part of the lift or its attachment to the vehicle which could affect the function of the lift.

**Drift**

A load of 454 kg is applied to the platform, positioned at floor level. Measurements are taken of the height of the platform and its angular attitude relative to the vehicle floor. These measurements are repeated after a 15 minute test period.

Verify that the vertical drift of the platform between the two measurements has not exceeded 15mm.

Verify that the angular drift of the platform between the two measurements has not exceeded 2º.

**Test to Verify that the Lift Cannot Lift Excessive Load**

A load of 454 kg is applied to the platform, positioned at ground level. Actuate the UP control and verify that the platform does not lift (tilt is permissible).

1. Lower platform to the ground.
2. Place 454 kg at center of platform.
3. Press UP switch and verify platform does not lift (tilt is permissible).
4. If platform does not lift, proceed to Dynamic Test. If platform does lift, proceed to step 5, pump relief valve adjustment is necessary.
5. Access relief valve (see illustration on following page). Loosen 9/16" hex nut on the relief valve adjustment screw (do not remove hex nut).
6. Turn adjustment screw counterclockwise 1/8 turn.
7. Press UP switch and verify platform does not lift (tilt is permissible).
8. If platform does not lift, tighten 9/16" hex nut (do not turn relief valve adjustment screw while tightening hex nut). If platform does lift, repeat steps 6 through 8.

# Static and Dynamic Tests

**Dynamic Test**

With 363 kg applied to the platform, verify that the lift is able to operate throughout its full range of normal lifting and lowering.

1. Lower platform to the ground.

2. Place 363 kg at center of platform.

3. Press UP switch and verify that the lift is able to operate throughout its full range of normal lifting and lowering movements.

4. If platform is able to operate throughout its full range of normal lifting and lowering movements, no adjustment is necessary. If platform does not lift, proceed to step 5, pump relief valve adjustment is necessary.

5. Access relief valve (see illustration below). Loosen 9/16" hex nut on the relief valve adjustment screw (do not remove hex nut).

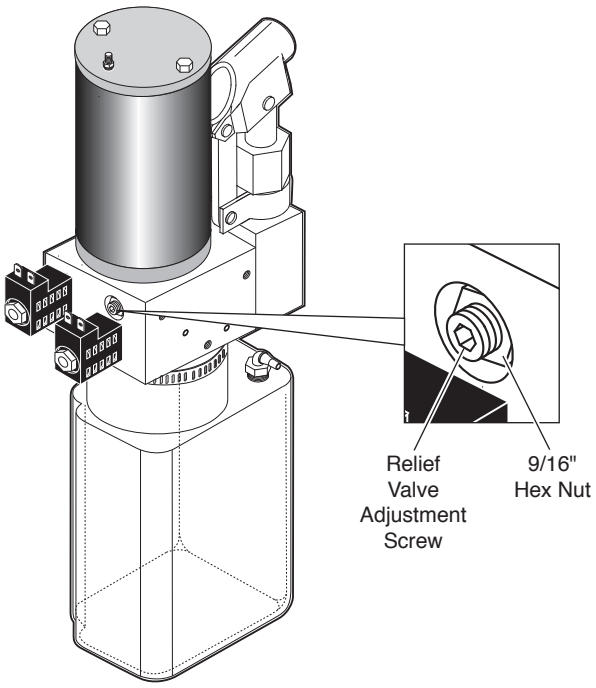
6. Turn adjustment screw clockwise 1/8 turn.

7. Press UP switch and verify lift is able to operate throughout its full range of normal lifting and lowering movement.

8. If lift does not operate throughout its full range, repeat steps 6 through 8. If lift does operate throughout its full range, tighten 9/16" hex nut (do not turn relief valve adjustment screw while tightening hex nut).

**Test of Operations and Safety Functions**

All functions of the lift and operations of all safety devices are verified after the static and dynamic tests have been completed. These tests do not apply to pipe break valves nor non-resettable safety devices such as electrical fuses (These items are the subject of a manufacturer's type test).



# Maintenance and Lubrication

Proper maintenance is necessary to ensure safe, trouble-free lift operation. Inspecting the lift for any wear, damage or other abnormal conditions should be a part of the transit agency daily service program. Simple inspections can detect potential problems.

Park vehicle on a level surface clear of traffic and bystanders. Place vehicle transmission in “Park” and engage parking brake. Deploy lift to ground level. Provide adequate work space around fully-deployed lift. Perform specified maintenance and lubrication procedures (position lift as required).

Pump Module: When cleaning the exterior of the pump module, first disconnect the unit from its power source. Do not use liquid cleaners, aerosols, abrasive pads, scouring powders or solvents, such as benzine or alcohol. Use a soft cloth lightly moistened with a mild detergent solution. Ensure the surface cleaned is fully dry before reconnecting power.

Other Components: Clean components and the surrounding area before applying lubricants. Clean only with mild detergent and water. Do not clean with solvents. Allow the lift to dry thoroughly and apply lubricants as specified after every cleaning.

LPS2 General Purpose Penetrating Oil is recommended where Light Oil is called out. Use of improper lubricants can attract dirt or other contaminants which could result in wear or damage to components. Platform components exposed to contaminants when lowered to the ground may require extra attention.

**⚠WARNING**

**Maintenance and lubrication procedures must be performed as specified by an authorized service technician. Failure to do so may result in serious bodily injury and/or property damage.**

Perform maintenance and lubrication procedures at the scheduled intervals according to the number of cycles. When servicing the lift at the recommended intervals, inspection and lubrication procedures specified in the previous sections should be repeated.

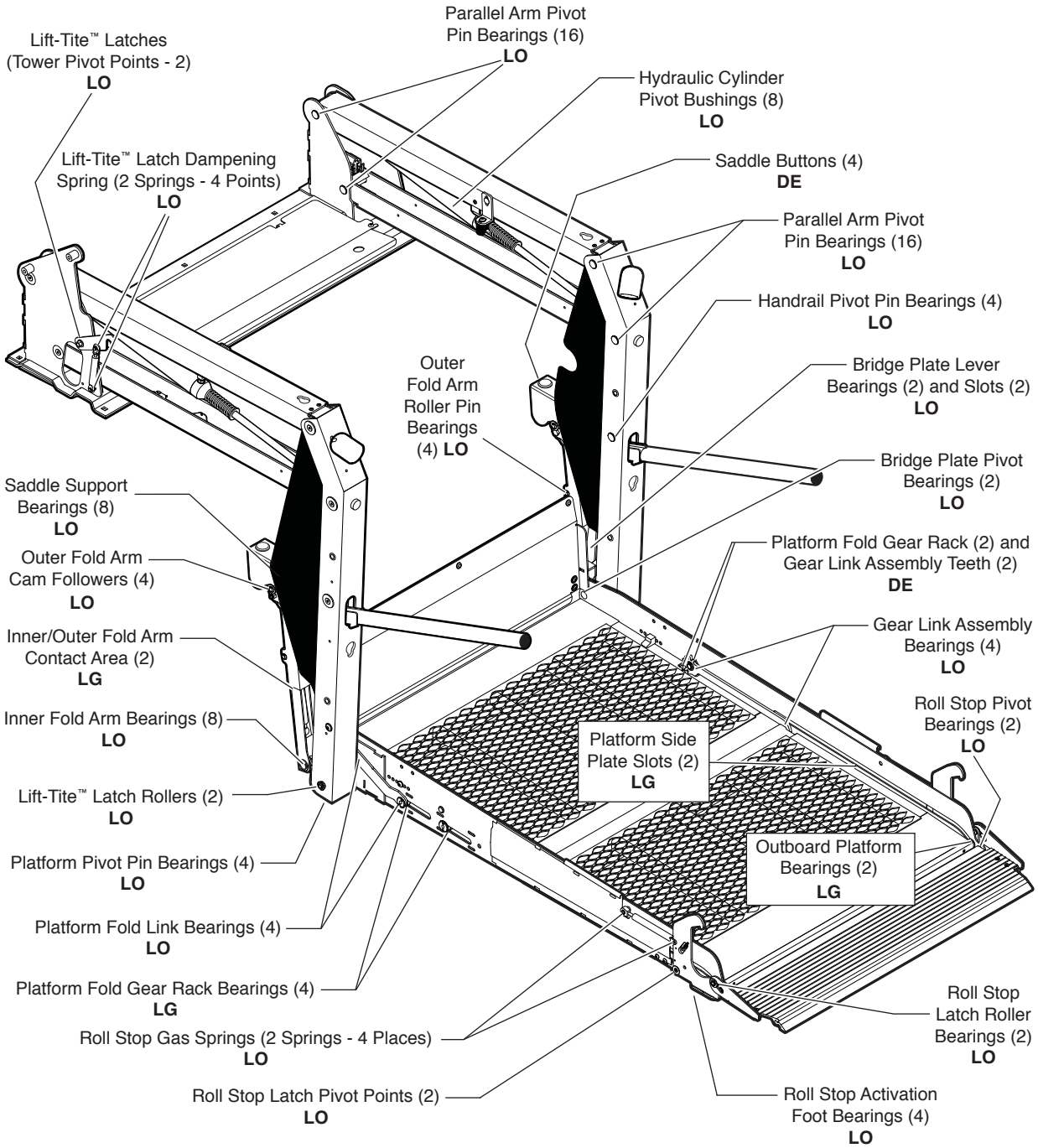
These intervals are a general guideline for scheduling maintenance procedures and will vary according to lift use and conditions. Lifts exposed to severe conditions (weather, environment, contamination, heavy usage, etc.) may require inspection and maintenance procedures to be performed more often than specified.

Records of maintainence and service procedures should be maintained.

Discontinue lift use if maintenance and lubrication procedures are not properly performed, or if there is any sign of wear, damage or improper operation. Contact your authorized representative.

# Maintenance and Lubrication

## Lubrication Diagram




See the Maintenance/Lubrication Schedule for recommended applications per number of cycles.

| Lubricant | Type | Specified (recommended) Lubricant | Available Amount | Braun Part No. |
|---|---|---|---|---|
| **LO - Light Oil** | Light Penetrating Oil (30 weight or equivalent) | LPS2, General Purpose Penetrating Oil | 16 oz. Aerosol Can | 15807 |
| **DE - Door-Ease** | Stainless Stick Style (tube) | Door-Ease Stick (tube) | 1.68 oz. | 15806 |
| **LG - Light Grease** | Light Grease (Multipurpose) | Lubriplate | 14 oz. Can | 15805 |

# Maintenance and Lubrication Schedule

| | | |
|---|---|---|
| **750 Cycles** | Roll stop pivot points (2) | Apply Light Oil - See Lubrication Diagram |
| | Roll stop latch pivot points (2) | Apply Light Oil - See Lubrication Diagram |
| | Roll stop latch roller bearing (2) | Apply Light Oil - See Lubrication Diagram |
| | Roll stop gas springs (2 springs - 4 points) | Apply Light Oil - See Lubrication Diagram |
| | Gear link assembly bearings (4) | Apply Light Oil - See Lubrication Diagram |
| | Gear link assembly teeth (2) | Apply Door Ease - See Lubrication Diagram |
| | Outboard platform bearings (2) | Apply Light Grease - See Lubrication Diagram |
| | Platform fold link bearings (4) | Apply Light Oil - See Lubrication Diagram |
| | Platform fold gear rack bearings (4) | Apply Light Grease - See Lubrication Diagram |
| | Platform fold gear rack teeth (2) | Apply Door Ease - See Lubrication Diagram |
| | Lift-Tite™ latches (tower pivot points - 2) | Apply Light Oil - See Lubrication Diagram |
| | Lift-Tite™ latch gas (dampening) spring pivot points (2 springs - 4 points) | Apply Light Oil - See Lubrication Diagram |
| | Platform side plate slots | Apply Light Grease - See Lubrication Diagram |
| | Inspect Lift-Tite™ latches and gas (dampening) springs for wear or damage (bent, deformed or misaligned), positive securement (lock nuts / external snap rings) and proper operation | Resecure, replace damaged parts or otherwise correct as needed. Note: Apply Light Grease to Lift-Tite™ latch tower pivot point if replacing latch |
| | Inspect roll stop for proper operation | Correct or replace damaged parts. |
| | Inspect roll stop latch for proper operation, positive securement, and detached or missing spring(s) | Correct or replace damaged parts and/ or relubricate. See Lubrication Diagram |
| | Adjust fold pressure | See Platform Fold Pressure Adjustment |

# Maintenance and Lubrication Schedule

| | | |
|---|---|---|
| **750 Cycles** | Inspect lift for wear, damage or any abnormal condition | Correct as needed. |
| | Inspect lift for rattles | Correct as needed. |

| | | |
|---|---|---|
| **1500 Cycles** | Inner/outer fold arms (2) | Apply grease (synthetic) to contact areas between inner/outer fold arms. See Lubrication Diagram |
| | Platform pivot pin bearings (4) | Apply Light Oil - See Lubrication Diagram |
| | Inner fold arm bearings (8) | Apply Light Oil - See Lubrication Diagram |
| | Bridge plate pivot bearings (2) | Apply Light Oil - See Lubrication Diagram |
| | Bridge plate lever bearings (2) | Apply Light Oil - See Lubrication Diagram |
| | Bridge plate lever slot (2) | Apply Light Oil - See Lubrication Diagram |
| | Saddle support bearings (8) | Apply Light Oil - See Lubrication Diagram |
| | Outer fold arm roller pin bearings (4) | Apply Light Oil - See Lubrication Diagram |
| | Outer fold arm cam followers (4) | Apply Light Oil - See Lubrication Diagram |
| | Parallel arm pivot pin bearings (16) | Apply Light Oil - See Lubrication Diagram |
| | Handrail / switch arm pivot pin bearings (4) | Apply Light Oil - See Lubrication Diagram |
| | Hydraulic cylinder pivot bushings (8) | Apply Light Oil - See Lubrication Diagram |
| | Inspect Lift-Tite™ latch rollers for wear or damage, positive securement and proper operation (2) | Correct, replace damaged parts and/or relubricate. See Lubrication Diagram. |
| | Inspect bridge plate for:<br>• Wear or damage<br>• Proper operation. Roll stop should just rest on top surface of the base plate cover.<br>• Positive securement (both ends) | Resecure, replace or correct as needed. See Platform Angle Instructions and Tower Microswitch Adjustment Instructions. |

# Maintenance and Lubrication Schedule

| | | |
|---|---|---|
| **1500 Cycles** | Inspect handrail / switch arm components for wear or damage, and for proper operation | Replace damaged parts. |
| | Inspect microswitches for securement and proper adjustment. | Resecure, replace or adjust as needed. See Microswitch Adjustment Instructions. |
| | Make sure lift operates smoothly | Realign towers and vertical arms. Lubricate or correct as needed. |
| | Inspect bridge plate locks (2) and torsion springs (2) for wear or damage and for proper operation | Replace damaged parts. Apply Light Oil to bridge plate lock pivot point. |
| | Inspect external snap rings:<br>• Inner fold arms (6)<br>• Lift-Tite™ latch rollers (2)<br>• Lift-Tite™ latch gas (dampening) springs (4)<br>• Roll stop latch gas springs (2)<br>• Roll stop latch pivots (2)<br>• Roll stop switch lever pivot (1)<br>• Roll stop latch rollers (2)<br>• Outer fold arm cam followers (4)<br>• Outer fold arm roller pins (4)<br>• Bridge plate lever bracket pins (2) | Resecure or replace if needed. |
| | Inspect inner fold arm pins (2), axles (2) and bearings (8) for wear or damage and positive securement | Replace damaged parts and resecure as needed. Apply Light Oil. |
| | Remove pump module cover and inspect:<br>• Hydraulic hoses, fittings and connections for wear or leaks<br>• Harness cables, wires, terminals and connections for securement or damage<br>• Up / Fold Solenoid, fuses, relays and switches for securement or damage | Resecure, replace or correct as needed. |

| | | |
|---|---|---|
| **4500 Cycles** | Hydraulic Fluid (Pump) - Check level. Note: Fluid should be changed if there is visible contamination. Inspect the hydraulic system (cylinder, hoses, fittings, seals, etc.) for leaks if fluid level is low. | Use Braun 32840-QT hydraulic fluid (Exxon® Univis HVI 26). Do not mix with Dextron III or other hydraulic fluids. Check fluid level with platform lowered fully. Fill to maximum fluid level indicated on reservoir (specified on decal). Do not overfill. If fluid level decal is not present - measure 35mm (1-3/8”) from the fill port to locate fluid level. |

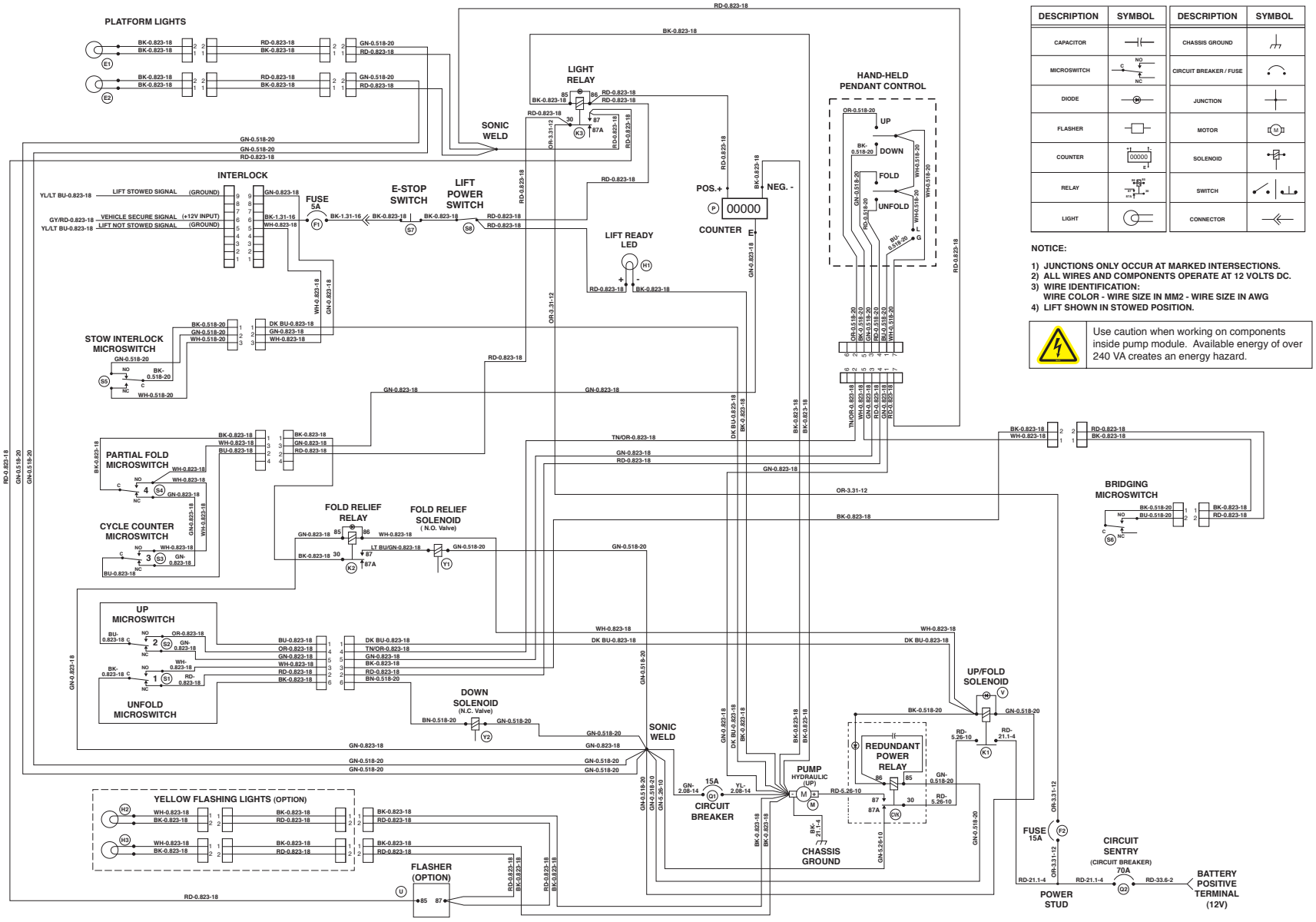
# Maintenance and Lubrication Schedule

| | | |
|---|---|---|
| **4500 Cycles** | Inspect cotter pins on platform pivot pins (2) | Resecure, replace or correct as needed |
| | Inspect cylinders, fittings and hydraulic connections for wear, damage or leaks | Tighten, repair or replace if needed. |
| | Inspect parallel arms, bearings and pivot pins for visible wear or damage | Replace if needed. |
| | Inspect parallel arm pivot pin mounting bolts (8) | Tighten or replace if needed. |
| | Inspect platform pivot pins, bearings and vertical arms for wear, damage and positive securement | Replace damaged parts and lubricate if needed. Apply Light Grease during reassembly procedures. |
| | Inspect inner/outer fold arms, saddle, saddle support and associated pivot pins and bearings for visible wear or damage | Replace if needed. |
| | Inspect gas springs (cylinders -6) for wear or damage, proper operation and positive securement | Tighten, replace or correct as needed |
| | Inspect saddle buttons (4) | Apply Door-Ease or replace if needed. See Lubrication Diagram. |
| | Inspect vertical arm plastic covers | Resecure or replace if needed. |
| | Inspect power cable | Resecure, repair or replace if needed. |
| | Mounting | Check to see that the lift is securely anchored to the vehicle and there are no loose bolts, broken welds, or stress fractures. |
| | Decals and Antiskid | Replace decals if worn, missing or illegible. Replace antiskid if worn or missing. See Decals and Antiskid section. |

| | |
|---|---|
| **Consecutive 750 Cycle Intervals** | Repeat all previously listed inspection, lubrication and maintenance procedures at 750 cycle intervals. |

| | |
|---|---|
| **Lift Disposal Procedure** | 1. Return lift to an authorized dealer for draining of the hydraulic system.<br>2. Transport lift to a recycling center for recycling. |

# 12V Lift Electrical Schematic




| DESCRIPTION | SYMBOL | DESCRIPTION | SYMBOL |
|---|---|---|---|
| CAPACITOR | | CHASSIS GROUND | |
| MICROSWITCH | | CIRCUIT BREAKER / FUSE | |
| DIODE | | JUNCTION | |
| FLASHER | | MOTOR | |
| COUNTER | | SOLENOID | |
| RELAY | | SWITCH | |
| LIGHT | | CONNECTOR | |

**NOTICE:**

1) JUNCTIONS ONLY OCCUR AT MARKED INTERSECTIONS.
2) ALL WIRES AND COMPONENTS OPERATE AT 12 VOLTS DC.
3) WIRE IDENTIFICATION:
   WIRE COLOR - WIRE SIZE IN MM2 - WIRE SIZE IN AWG
4) LIFT SHOWN IN STOWED POSITION.

Use caution when working on components inside pump module. Available energy of over 240 VA creates an energy hazard.

## NOTES

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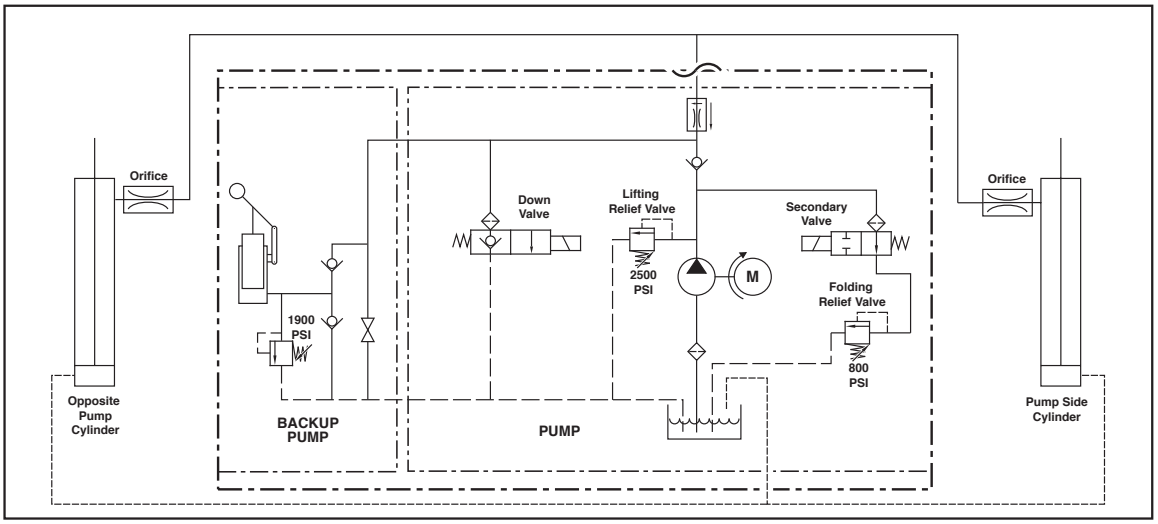
# Hydraulic Schematic




| Description | Symbol | Description | Symbol |
|---|---|---|---|
| Fixed Displacement Pump | | Hydraulic Port | |
| Pump Motor | | 2 Way 2 Position Solenoid Valve | |
| Backup Pump | | Pressure Compensated Flow Control | |
| Single Acting Cylinder | | Relief Valve | |
| Check Valve | | Filter Screen | |
| Unfold Orifice | | Vented Reservoir | |
| Manual Shutoff Valve | | | |

# Hydraulics Parts List

| Item | Qty. | Description | Part # |
|---|---|---|---|
| 1 | 1 | Pump Assembly (M-268-0116) 120G / 12V / Dual Relief | 32858-12V |
| 2 | 1 | Clamp, Reservoir - H-48 (M259) | 17069 |
| 3 | 1 | Solenoid, 4-Post Trombetta - Angle | 35310 |
| 4 | 1 | Motor, Pump - 12 Volt - Low RPM | 29690 |
| 5 | 1 | Valve Assembly, “Fold Relief” (complete) | 31120K |
| 6 | 1 | Cartridge (only), “Fold Relief” Valve - (shown below) | 31121 |
| 7 | 2 | Coil (only) - (shown below) | 31122 |
| 8 | 1 | Valve Assembly, “Down” (complete) | 31348K |
| 9 | 1 | Cartridge (only), “Down” Valve - (shown below) | 26078 |
| 10 | 1 | Clamp, Hose - Solenoid Mounting | 29663 |
| 11 | 1 | Reservoir, Hydraulic Fluid | 30160 |
| 12 | 1 | Cap, Reservoir Filler - Screw On | 30167 |
| 13 | 1 | Fitting, 90° - 1/8" NPT x 1/8" Barb - Plastic | 87563 |
| 14 | 1 | Hand Pump (Backup) with O-Rings (Item 16) | 26074 |
| 15 | 3 | Screw, 1/4-20 x 2-1/4", Allen Head | 26080 |
| 16 | 4 | O-Ring (only), Hand Pump Mounting | 17351 |
| 17 | 1 | Diode Assembly, Up Solenoid | 73906A |
| 18 | 1 | Hose, Thermal Plastic - Black, 1/8" I.D. | 23742R* |
| 19 | 1 | Connector, Plastic “Y”, 1/8” O.D. | 18877 |
| 20 | 1 | Fitting, Male 7-16-20 SAE O-Ring to Male 7/16-20 JIC 37° | 24504 |
| 21 | 1 | Elbow, 7/16-20 JIC 37 Female Swivel (1) - 7/16-20 JIC 37° Male (2) | 26579 |
| 22 | 1 | Hose Assembly, 1/8" (Opposite-Pump-Side) | 16004A-078 |
| 23 | 1 | Hose Assembly, 1/8" (Pump-Side) | 16004A-040 |
| 24 | 2 | Cylinder ✓ (VL995IB2740-2) | C1512.8-0408LT |
| 25 | 2 | Elbow, 90°, 7/16-20 SAE O-Ring Male - 7/16-20 JIC 37° Male, Orifice | 26667 |
| 26 | 2 | Elbow, 90°, 1/4 NPT Male to 1/4" Barbed | 15150 |
| 27 | 1 | Handle with Grip | 17206A |
| 28 | 1 | Kit, Hydraulic Port Service Cap | 27049K |
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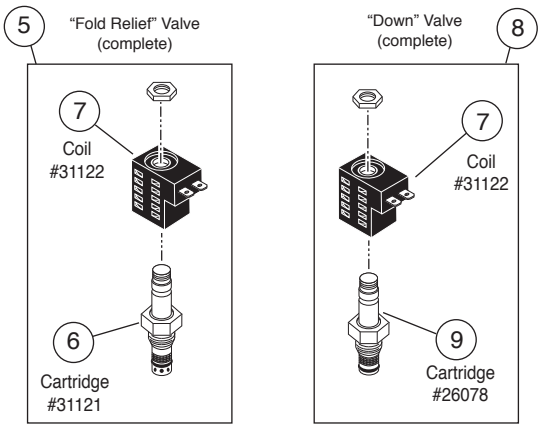
✓ **Seal Kits:** If repairing a cylinder, order Seal Kit #1500-0500P.

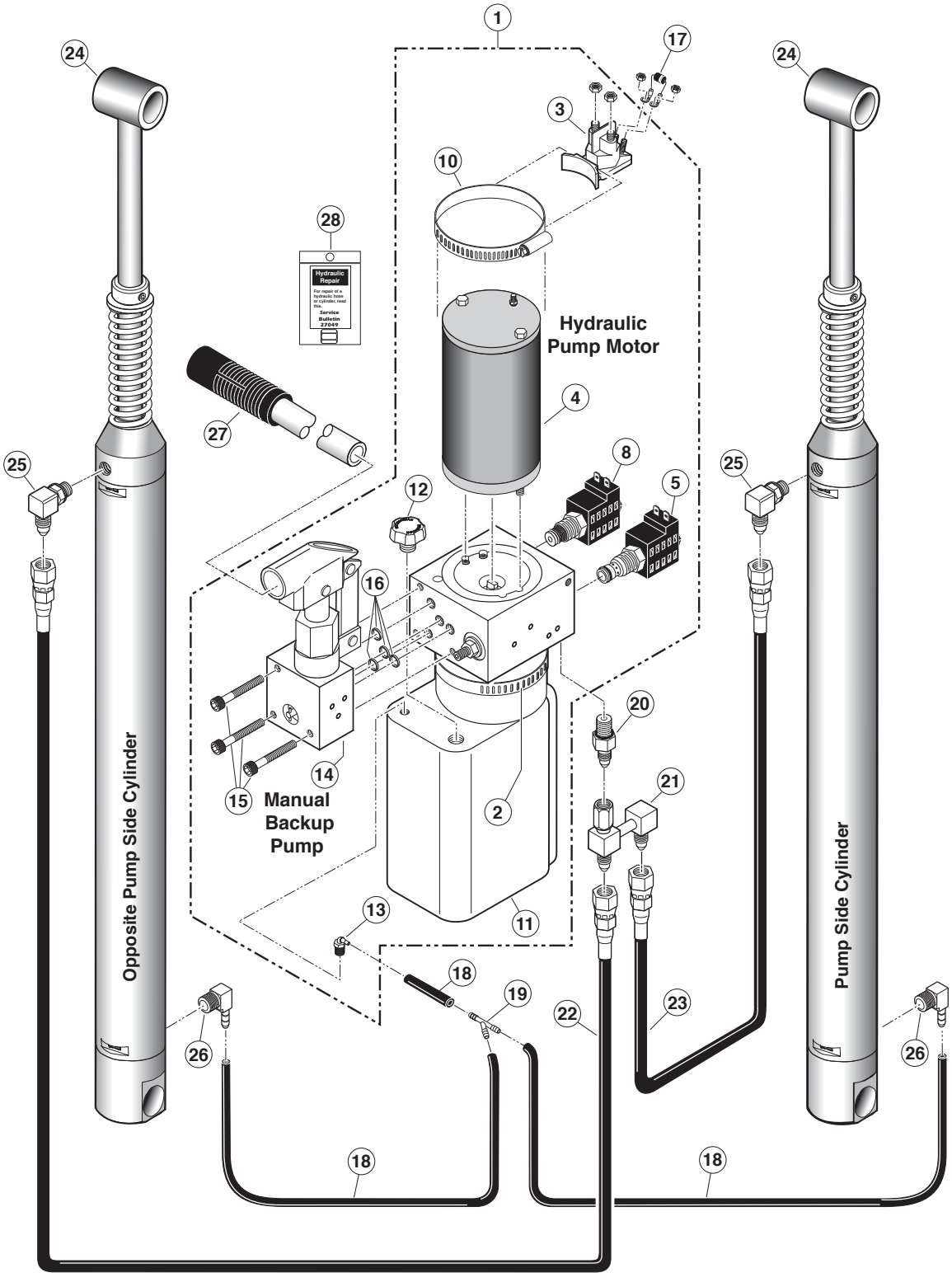
* Raw material items ordered and priced per inch (order specified length).




**NOTICE**

When adding or changing hydraulic fluid, use Braun 32840-QT (Exxon® Univis HVI 26) hydraulic fluid (do not mix with Dextron III or other hydraulic fluids).

# Hydraulics Diagram




| | |
|---|---|
| | Use caution when working on components inside pump module. Available energy of over 240 VA creates an energy hazard. |

**NOTICE**

Remove power from pump module and any spark source before working with hydraulic fluid and components. Wear proper eye protection. Use protective gloves for prolonged contact with hydraulic fluid.

# Pump Module Parts List

| Item | Qty. | Description | Part No. |
|---|---|---|---|
| | 1 | Pump Module (complete) ✘ | V995-0516RA |
| 1 | 1 | Cover, Pump Module | 947-2519RN |
| 2 | 1 | Guard, Splash | 36377R |
| 3 | 1 | Housing, Pump | 991-0513RW |
| | | Housing, Pump Assy (Items 3-12) | 991-0513RA |
| 4 | 1 | Stud, Power Feed | 26084 |
| 5 | 2 | Clamp, Spring - Pump Handle | 12350 |
| 6 | 4 | Rivet, Pop, SD43BS - 1/8" - .13"/.19" | 12954 |
| 7 | 5 | Rivet, Pop, SD62BS - 3/16" - .06"/.13" | 11512 |
| 8 | 2 | Screw, #10-32 x 1/2", BHSC, Auto-Bk | 30377 |
| 9 | 1 | Diode, Green LED | 29545 |
| 10 | 1 | Circuit Breaker, Manual Reset - 15 Amperes | 35143 |
| 11 | 1 | E-Stop Button w/ Retaining Nut | 36414-1 |
| 12 | 1 | Switch, Toggle w/ Gold Contacts | 31787 |
| 13 | 1 | Pump Assembly (M268-0116) 12V-120G - Dual Relief (Includes Items 14 & 15) | 32858-12V |
| 14 | 1 | Solenoid, Up - 4-Post Trombetta - Angle | 35310 |
| 15 | 1 | Clamp, Hose - Solenoid Mounting | 29663 |
| 16 | 1 | Harness, Main | V917-0500A |
| 17 | 1 | Fitting, Male 7/16-20 O-Ring to Male 7/16-20 JIC 37° | 24504 |
| 18 | 1 | Elbow, Manifold - Female Swivel 7/16-20 JIC 37° to (2) Male 7/16-20 JIC 37° | 26579 |
| 19 | 4 | Rivet, Snap, .122" Dia. - .158" -.197" Thick | 25759 |
| 20 | 4 | Washer, 5/16" External Tooth | 16368 |
| 21 | 2 | Bolt, 5/16-18 x 3/4", Nylock, Hex * See note below | 29608 |
| 22 | 2 | Bolt, 5/16-18 x 1/2", Nylock, Hex * See note below | 10012 |
| 23 | 1 | Pump Handle with Grip | 17206A |
| 24 | 1 | Cycle Counter, LCD w/o Reset | 30547 |
| 25 | 2 | Relay, 30/40A SPDT 12V with Internal Diode | 35249 |
| 26 | 1 | Cable, Pump Module Power | 26082A-4 |
| 27 | 1 | Cable, Lift / Chassis Ground | 22166A |
| 28 | 1 | Wire Assembly, Lift Interlock Connection | 31797A |
| 29 | 1 | Wire Assembly, Lift Stowed Connection ♦ | 31798A |
| 30 | 1 | Rubber Boot, Red ♦ | 82046 |
| 31 | 1 | Control, Hand Pendant Assembly - Non Electronic / Non Shielded - Coiled ♦ | 36509A |
| 32 | 1 | Diode Assembly, Up Solenoid | 73906A |
| 33 | 1 | Harness, Lift Power ♦ | 33885A |
| 34 | 3 | Washer, #10 Flat | 11541 |
| 35 | 1 | Fuse Kit, 5 Amperes (F1) & 15 Amperes (F2) | 36521K |
| 36 | 1 | Kit, Hydraulic Port Service Cap | 27049K |
| 37 | 1 | Rivet, Snap - Black .201" x .177/.217" | 30408 |
| 38 | 1 | Harness, Bridge Input ✘ | 35608RA |
| 39 | 1 | Harness, Extension Lighting ✘ | 31033A45 |
| 40 | 1 | Harness, Extension Lighting ✘ | 31033A84 |
| 41 | 1 | Harness, Tower (Pump Side) ✘ | 37014A |
| 42 | 1 | Harness, Tower (Opposite Pump Side) ✘ | 37010A |
| 43 | 1 | Harness, Stow ✘ | 33377RA |
| 44 | 1 | Hose Assy, 1/8" (Opposite Pump Side) ✘ | 16004A-078 |
| 45 | 1 | Hose Assy, 1/8" (Pump Side) ✘ | 16004A-040 |
| 46 | 1 | Hose, 1/8" Thermal Plastic ✘ (Raw material ordered and priced per inch - order specified length) | 23742R |
| 47 | 1 | Connector, Plastic Y-1/8" O.D. ✘ | 18877 |
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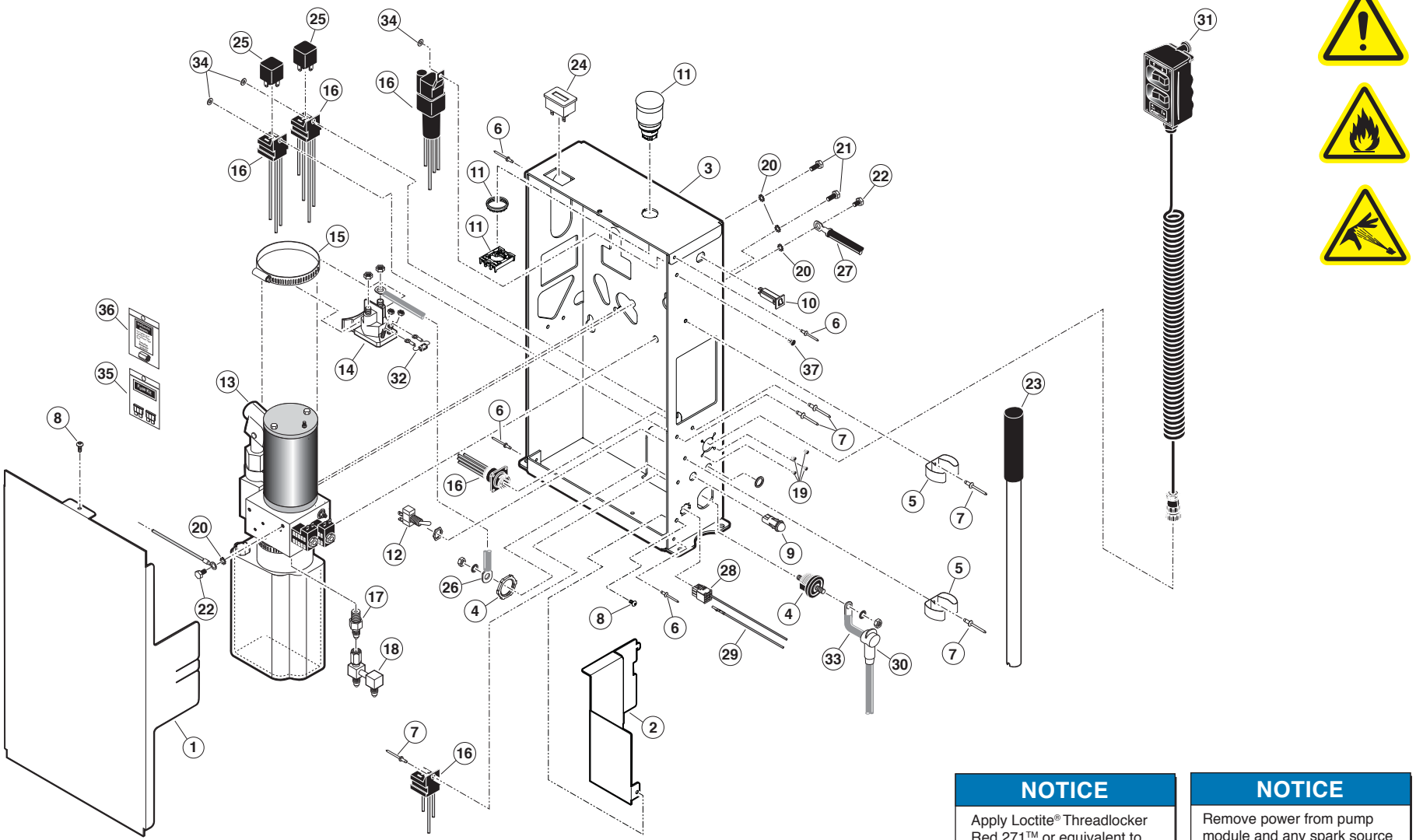
✘ Indicates items not shown.

▲ Apply Loctite® Threadlocker Red 271™ or equivalent to the four hex bolts (items 21 & 22) if a blue nylon patch is not present on the bolts when retrofitting an M268-0118 pump assembly.

♦ Indicates items available for replacement part purposes only. These items are not included with replacement pump modules.

# Pump Module Diagram




| | |
|---|---|
| | Use caution when working on components inside pump module. Available energy of over 240 VA creates an energy hazard. |

**NOTICE**

Apply Loctite® Threadlocker Red 271™ or equivalent to the four hex bolts (items 21 & 24) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly.

**NOTICE**

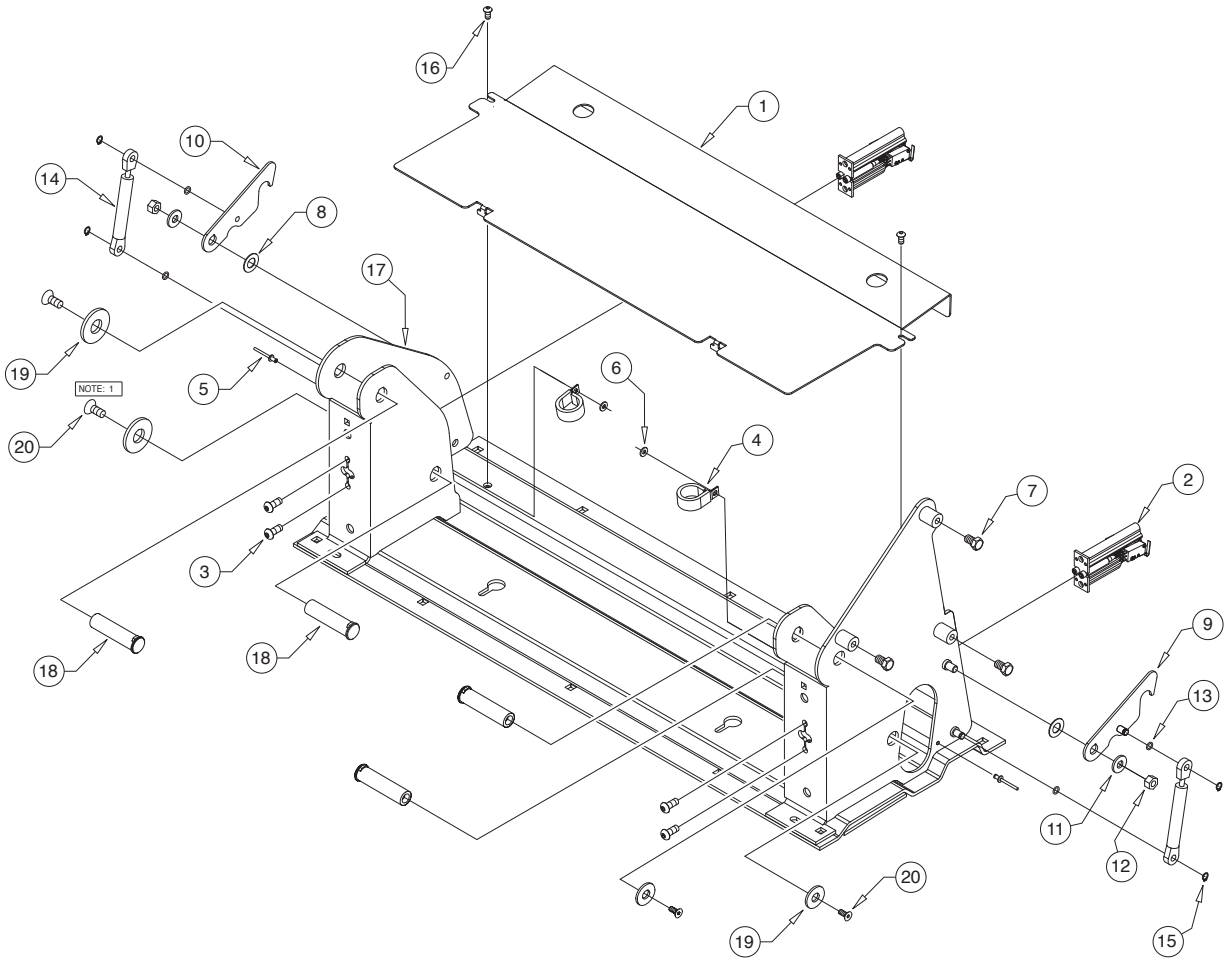
Remove power from pump module and any spark source before working with hydraulic fluid and components. Wear proper eye protection. Use protective gloves for prolonged contact with hydraulic fluid.

# Exploded Views and Parts Lists

## Base Plate Assembly

**NOTICE**

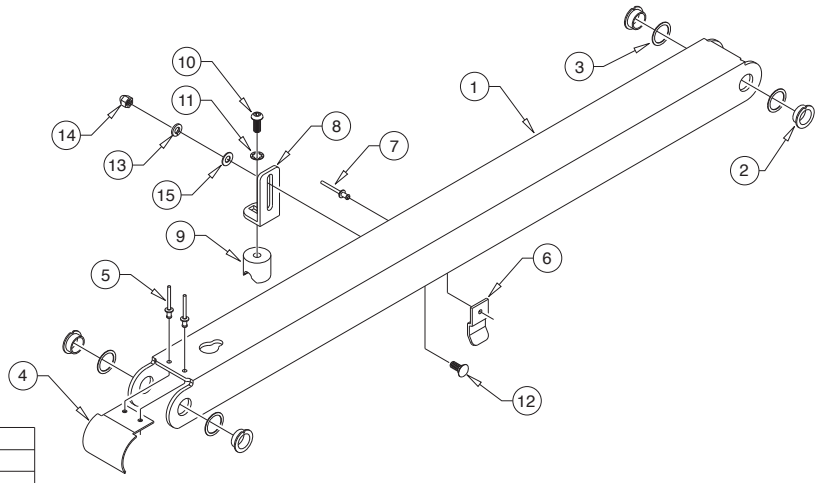
1) APPLY LOCTITE® THREADLOCKER RED 271™OR EQUIVALENT TO ALL #25527 SCREWS.




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 20 | 4 | 25527 | SCREW-5/16-18 X 3/4" FHS/AUTO-BK |
| 19 | 4 | 25346 | WASHER-1/2" FLAT/AUTO-BK |
| 18 | 4 | 936-0403 | PIN-PIVOT PARALLEL |
| 17 | 1 | 991-2142RW27 | WMT-BASE-REAR-26/FTG |
| 16 | 2 | 15733 | BOLT-1/4-20 X 1/2 BUT HD SOC/AUTO-BK |
| 15 | 4 | 24570 | RING-5/16 EXT SNAP/ZINC PLATED |
| 14 | 2 | 26963 | SPRING-DAMP5.67 E/4.291 C,P1=3.37N-RET |
| 13 | 4 | 26614 | O RING-5/16ID X 1/16 |
| 12 | 2 | 28339BK | NUT-3/8-16 UNC TOP LOCK/AUTO-BK |
| 11 | 2 | 10063 | WASHER-5/16 FLAT |
| 10 | 1 | 27013RW | WMT-LATCH-LIFT-TITE REAR-RETRO |
| 9 | 1 | 27013FW | WMT-LATCH-LIFT-TITE FRONT-RETRO |
| 8 | 2 | 11913 | WASHER-1/2" NYLON |
| 7 | 3 | 29729 | BOLT-3/8-16 X 1/2 W/NYLOCK PATCH |
| 6 | 2 | 11541 | WASHER-#10 FLAT/AUTO-BK |
| 5 | 2 | 14993 | RIV-POP-SD66BS-3/16"-.25/.38/AUTO-BK |
| 4 | 2 | 29765 | CLAMP-INSULATE 1 3/8" |
| 3 | 4 | 24440 | BOLT-5/16-18 X 3/4-BHSC/AUTO-BK |
| 2 | 2 | 975-4121A | MICRO SWITCH ASSY. |
| 1 | 1 | 917-2149-27 | BASE-COVER /-2 INTERNATIONAL-27" |

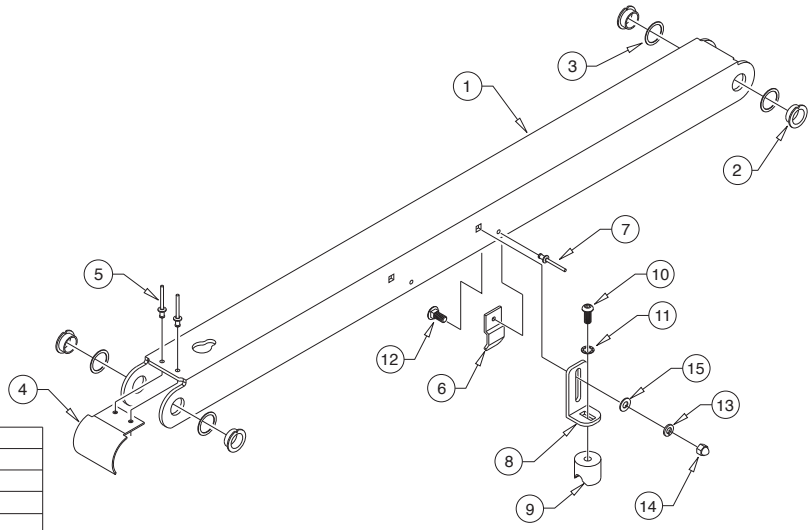
# Exploded Views and Parts Lists

## Top Parallel Arm Assembly - Front




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 15 | 1 | 10062 | WASHER-1/4" FLAT/AUTO-BK |
| 14 | 1 | 30996BK | NUT-5/16-18 ACORN |
| 13 | 1 | 10068 | WASHER-5/16" LOCK/AUTO-BK |
| 12 | 1 | 15858BK | BOLT-CARR 5/16-18 X 3/4/AUTO-BK |
| 11 | 1 | 16368 | WASHER-5/16" EXTERNAL TOOTH |
| 10 | 1 | 24440 | BOLT-5/16-18 X 3/4-BHSC/AUTO-BK |
| 9 | 1 | 28593A | ASSY-BLOCK-GUIDE-PLATFORM-STOW |
| 8 | 1 | 955-2392CLXT | BKT.-QUIET-RIDE MTG.-955 |
| 7 | 1 | 14993 | RIV-POP-SD66BS-3/16"-.25/.38/AUTO-BK |
| 6 | 1 | 915-0703 | BRACKET-INNER SIDE PANEL GUIDE |
| 5 | 2 | 11513 | RIV-POP-SD64BS-3/16"-.13/.25/AUTO-BK |
| 4 | 1 | 945-0450 | CAP-PARALLEL ARM |
| 3 | 4 | 34398 | WASHER-0.906"ID X 1.25"OD X .075"TH/ZINC |
| 2 | 4 | 24011 | BEARING-FLANGE-3/4" X 3/8"-12FDU06 |
| 1 | 1 | 991-0401FA | ARM-PARALLEL/TOP-FRONT (Incl. Items 1-15) |

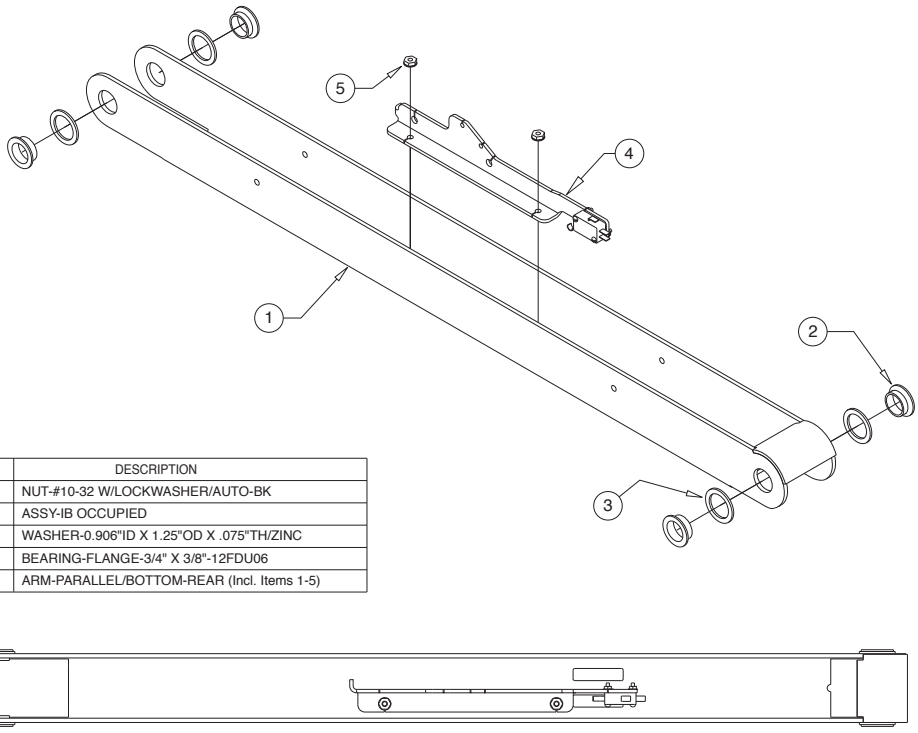
## Top Parallel Arm Assembly - Rear




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 15 | 1 | 10062 | WASHER-1/4" FLAT/AUTO-BK |
| 14 | 1 | 30996BK | NUT-5/16-18 ACORN |
| 13 | 1 | 10068 | WASHER-5/16" LOCK/AUTO-BK |
| 12 | 1 | 15858BK | BOLT-CARR 5/16-18 X 3/4/AUTO-BK |
| 11 | 1 | 16368 | WASHER-5/16" EXTERNAL TOOTH |
| 10 | 1 | 24440 | BOLT-5/16-18 X 3/4-BHSC/AUTO-BK |
| 9 | 1 | 28593A | ASSY-BLOCK-GUIDE-PLATFORM-STOW |
| 8 | 1 | 955-2392CLXT | BKT.-QUIET-RIDE MTG.-955 |
| 7 | 1 | 14993 | RIV-POP-SD66BS-3/16"-.25/.38/AUTO-BK |
| 6 | 1 | 915-0703 | BRACKET-INNER SIDE PANEL GUIDE |
| 5 | 2 | 11513 | RIV-POP-SD64BS-3/16"-.13/.25/AUTO-BK |
| 4 | 1 | 945-0450 | CAP-PARALLEL ARM |
| 3 | 4 | 34398 | WASHER-0.906"ID X 1.25"OD X .075"TH/ZINC |
| 2 | 4 | 24011 | BEARING-FLANGE-3/4" X 3/8"-12FDU06 |
| 1 | 1 | 991-0401RA | ARM-PARALLEL/TOP-REAR (Incl. Items 1-15) |

# Exploded Views and Parts Lists

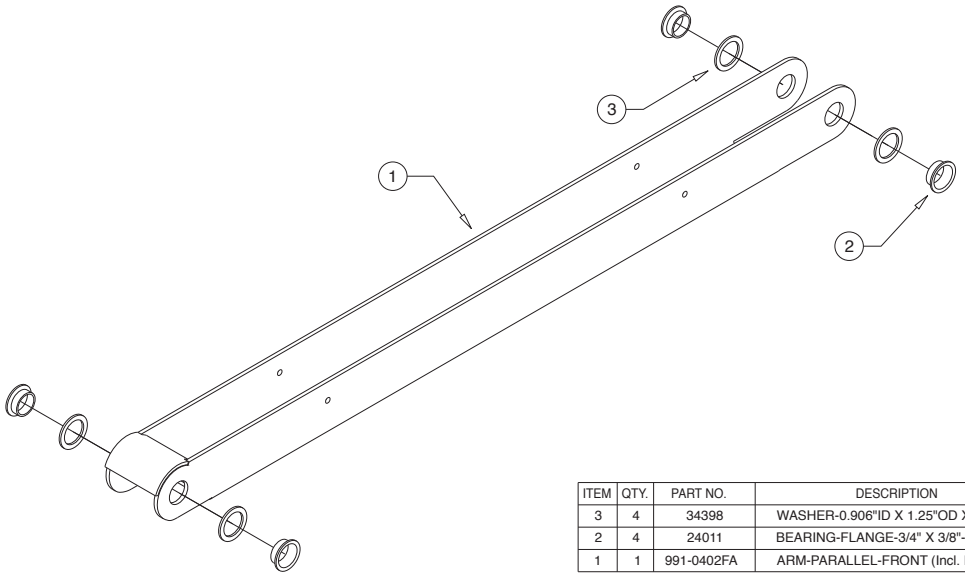
## Bottom Parallel Arm Assembly - Pump Side




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 5 | 2 | 18349 | NUT-#10-32 W/LOCKWASHER/AUTO-BK |
| 4 | 1 | 32514A | ASSY-IB OCCUPIED |
| 3 | 4 | 34398 | WASHER-0.906"ID X 1.25"OD X .075"TH/ZINC |
| 2 | 4 | 24011 | BEARING-FLANGE-3/4" X 3/8"-12FDU06 |
| 1 | 1 | 991-0402RA | ARM-PARALLEL/BOTTOM-REAR (Incl. Items 1-5) |



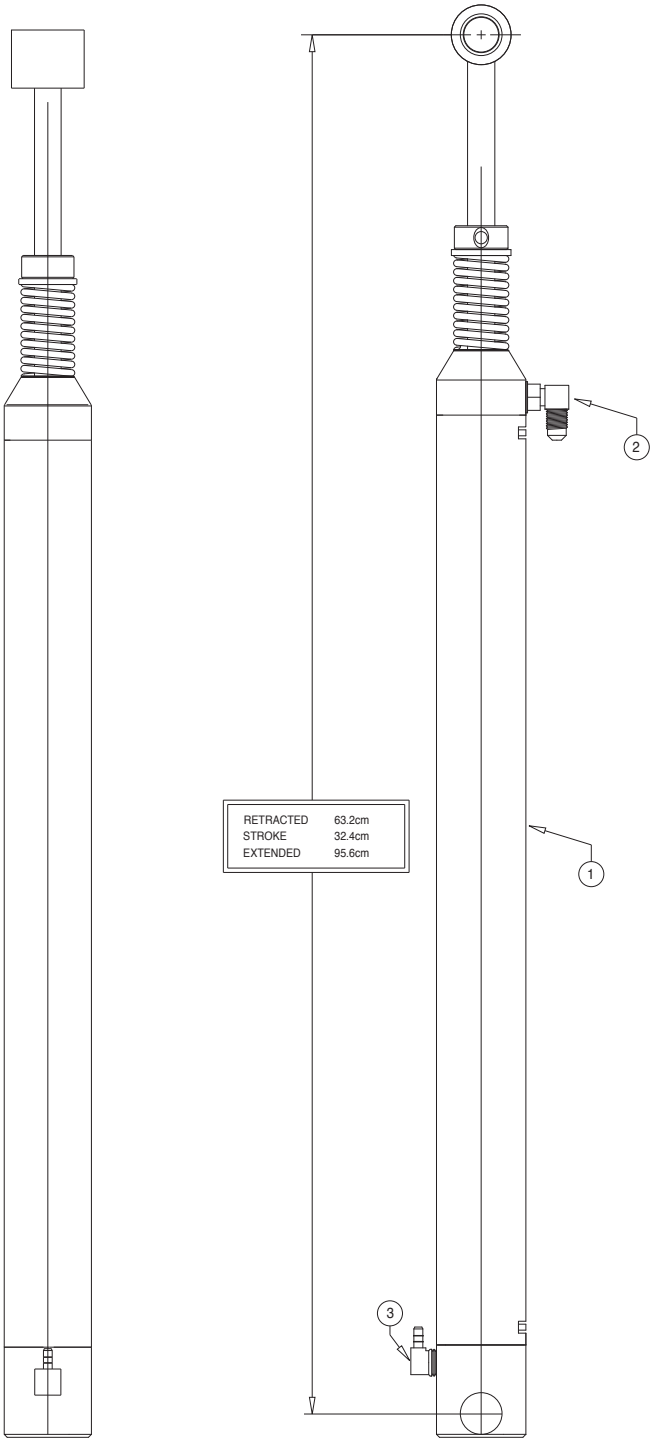
## Bottom Parallel Arm Assembly - Opposite Pump Side




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 3 | 4 | 34398 | WASHER-0.906"ID X 1.25"OD X .075"TH/ZINC |
| 2 | 4 | 24011 | BEARING-FLANGE-3/4" X 3/8"-12FDU06 |
| 1 | 1 | 991-0402FA | ARM-PARALLEL-FRONT (Incl. Items 1-3) |

# Exploded Views and Parts Lists

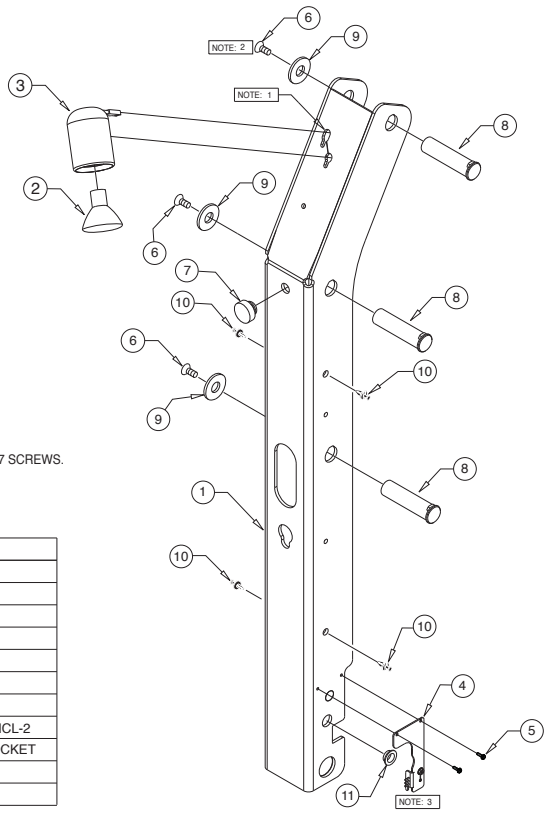
## Hydraulic Cylinder Assembly




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 3 | 1 | 15150 | ELBOW-1/4 NPT 90° 1/4 BARB |
| 2 | 1 | 26667 | ELBOW-7/16-20 M/O-RNG/37°/.035 ORFICE |
| 1 | 1 | C1512.8-0408LT | CYLINDER-12.750"/24.883 RETRACTED |

# Exploded Views and Parts Lists

## Vertical Arm Assembly - Rear

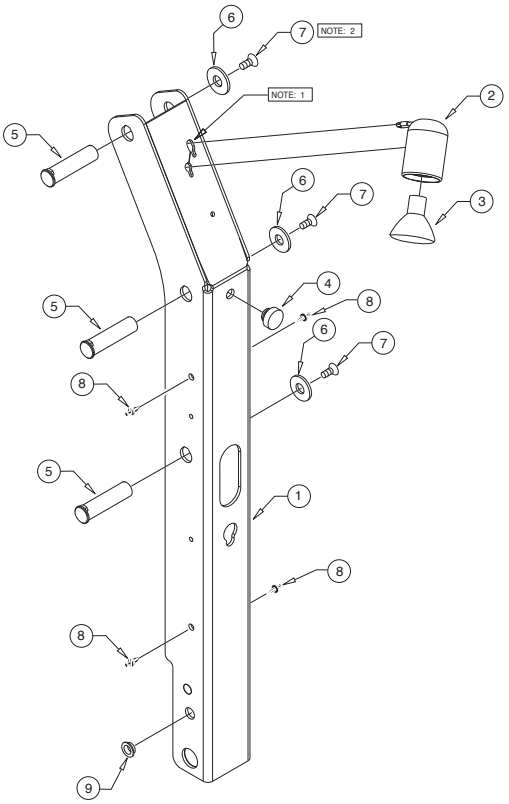



**NOTICE**

1) INSERT SOCKET OF LIGHT ASSY THRU TOP KEY WHILE INSTALLING LIGHT. TIGHTEN SCREWS.
2) APPLY LOCTITE® THREADLOCKER RED 271™ OR EQUIVALENT TO ALL #25527 SCREWS.
3) HARNESS TO BE TUCKED INSIDE CHANNEL.

| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 11 | 1 | 24442 | BEARING-FLANGE-1/2" X 1/4"-08FDU04 |
| 10 | 4 | 30063 | RIVET-PUSH IN-8MM |
| 9 | 3 | 25346 | WASHER-1/2" FLAT/AUTO-BK |
| 8 | 3 | 936-0403 | PIN-PIVOT PARALLEL |
| 7 | 1 | 32408 | RUBBER BUMPER-VERT CHAN. |
| 6 | 3 | 25527 | SCREW-5/16-18 X 3/4" FHS/AUTO-BK |
| 5 | 2 | 37049 | SCREW-#4-40 X 3/8"-THREAD FORM |
| 4 | 1 | 33689A | ASSY-BRIDGE SWITCH W/HARNESS-NL/NCL-2 |
| 3 | 1 | 31062A | ASSY-LIGHT-VERT. CHANNEL/PHILIPS SOCKET |
| 2 | 1 | 31060 | BULB-LIGHT-20W-HALOGEN REFLECTOR |
| 1 | 1 | 952-0442RW | WMT-VERTICAL CHANNEL-REAR-26"FTG |

## Vertical Arm Assembly - Front



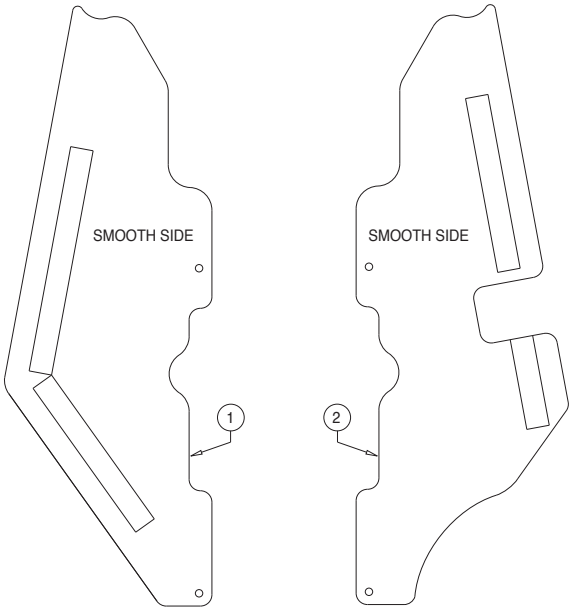

**NOTICE**

1) INSERT SOCKET OF LIGHT ASSY THRU TOP KEY WHILE INSTALLING LIGHT. TIGHTEN SCREWS.
2) APPLY LOCTITE® THREADLOCKER RED 271™ OR EQUIVALENT TO ALL #25527 SCREWS.

| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 9 | 1 | 24442 | BEARING-FLANGE-1/2" X 1/4"-08FDU04 |
| 8 | 4 | 30063 | RIVET-PUSH IN-8MM |
| 7 | 3 | 25527 | SCREW-5/16-18 X 3/4" FHS/AUTO-BK |
| 6 | 3 | 25346 | WASHER-1/2" FLAT/AUTO BK |
| 5 | 3 | 936-0403 | PIN-PIVOT PARALLEL ARM |
| 4 | 1 | 32408 | RUBBER BUMPER-VERT CHAN. |
| 3 | 1 | 31060 | BULB-LIGHT-20W-HALOGEN REFLECTOR |
| 2 | 1 | 31062A | ASSY-LIGHT-VERTICAL CHANNEL w/BULB |
| 1 | 1 | 952-0442FW | WMT-VERTICAL CHANNEL-FRONT-26"FTG |

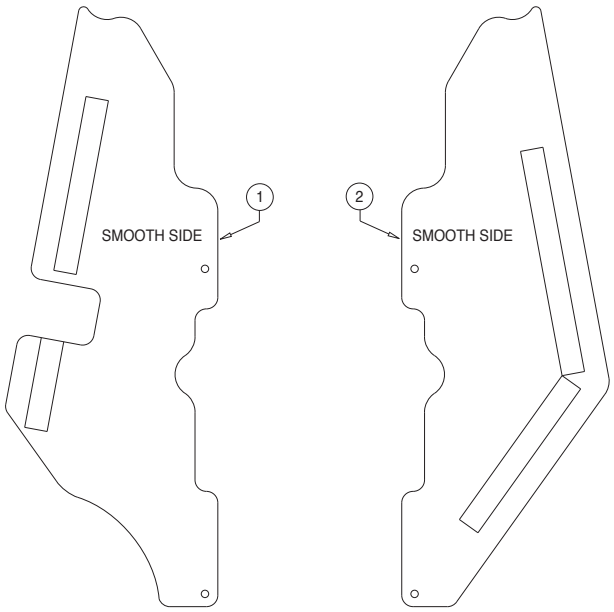
# Exploded Views and Parts Lists

## Front Arm Cover Assembly




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 2 | 1 | 991-0701A | COVER-PLASTIC-PARALLEL ARM-INSIDE-FRONT |
| 1 | 1 | 991-0704A | COVER-PLASTIC-PARALLEL ARM-OUTSIDE-FRONT |

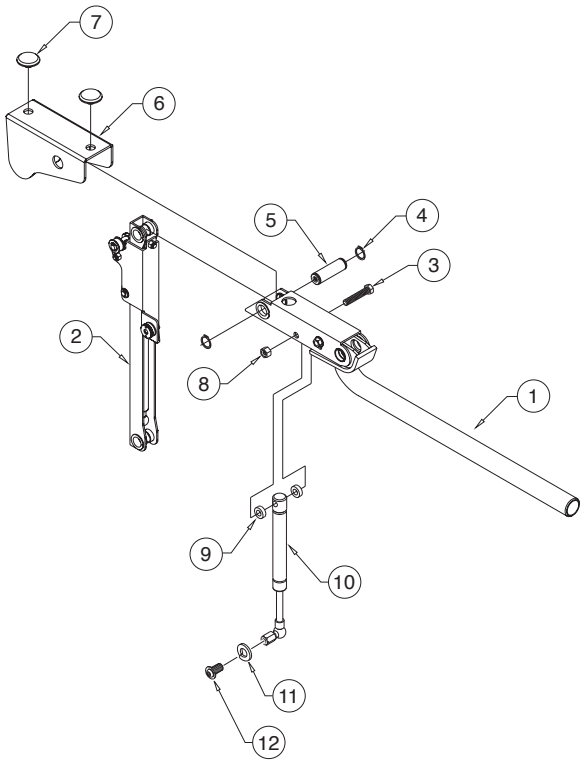
## Rear Arm Cover Assembly




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 2 | 1 | 991-0702A | COVER-PLASTIC-PARALLEL ARM-OUTSIDE-RR |
| 1 | 1 | 991-0703A | COVER-PLASTIC-PARALLEL ARM-INSIDE-RR |

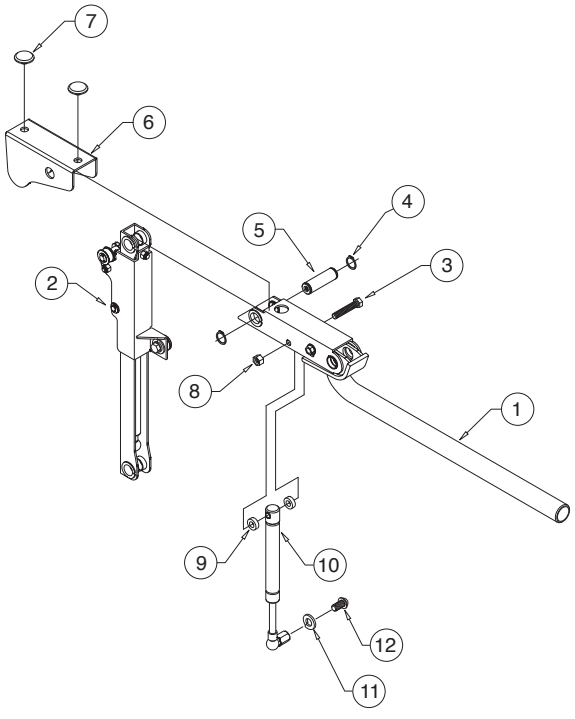
# Exploded Views and Parts Lists

## Front Handrail Assembly




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 12 | 1 | 25171 | BOLT-3/8-16 X 3/4" FLBHSCS-GD8 |
| 11 | 1 | 10069 | WASHER-3/8" LOCK |
| 10 | 1 | 29186A | GAS SPRING ASSY-14.468 EXT/8.956 COMP |
| 9 | 2 | 30227 | WASHER-UHMW 0.75" OD X 0.39" ID X 0.25" |
| 8 | 1 | 13617 | NUT-3/8-16 UNC HEX LOCK/AUTO-BK |
| 7 | 2 | 205-1760 | BEARING-UHMW FLAT/1226-THN-BLK |
| 6 | 1 | 991-0606 | SLIDE-PLATFORM ROTATE |
| 5 | 1 | 900-0413N | PIN-PIVOT LOWER ARM |
| 4 | 2 | 18657 | RING-3/4" EXT SNAP/AUTO-BK |
| 3 | 1 | 10027 | BOLT-3/8-16 X 2" HEX HD. CAP |
| 2 | 1 | 991-0640FA | ASSY-FOLD ARM-42 FTG-FRONT |
| 1 | 1 | 991-0618A | HANDRAIL ASSY |

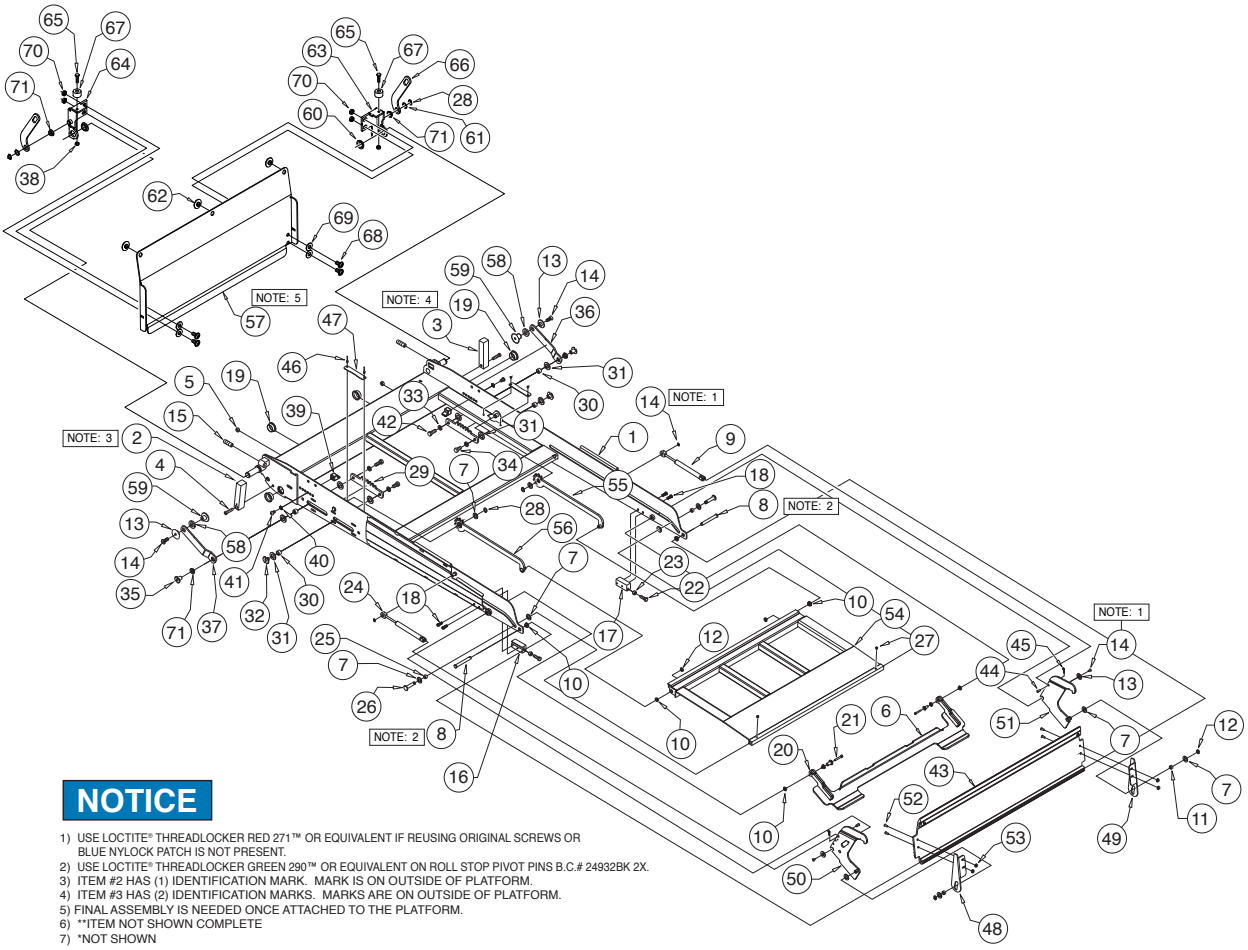
## Rear Handrail Assembly




| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 12 | 1 | 25171 | BOLT-3/8-16 X 3/4" FLBHSCS-GD8 |
| 11 | 1 | 10069 | WASHER-3/8" LOCK |
| 10 | 1 | 29186A | GAS SPRING ASSY-14.468 EXT/8.956 COMP |
| 9 | 2 | 30227 | WASHER-UHMW 0.75 OD X 0.39 ID X 0.25 |
| 8 | 1 | 13617 | NUT-3/8-16 UNC HEX LOCK/AUTO-BLK |
| 7 | 2 | 205-1760 | BEARING-UHMW FLAT/1226-THN-BLK |
| 6 | 1 | 991-0606 | SLIDE-PLATFORM-ROTATE |
| 5 | 1 | 900-0413N | PIN-PIVOT LOWER ARM |
| 4 | 2 | 18657 | RING-3/4 EXT SNAP/AUTO-BK |
| 3 | 1 | 10027 | BOLT-3/8-16 X 2" HEX HD. CAP |
| 2 | 1 | 991-0640RA | ASSY-FOLD ARM-42" FTG-REAR |
| 1 | 1 | 991-0618A | HANDRAIL ASSY |

# Exploded Views and Parts Lists

## Platform Assembly




**NOTICE**

1) USE LOCTITE® THREADLOCKER RED 271™ OR EQUIVALENT IF REUSING ORIGINAL SCREWS OR BLUE NYLOCK PATCH IS NOT PRESENT.
2) USE LOCTITE® THREADLOCKER GREEN 290™ OR EQUIVALENT ON ROLL STOP PIVOT PINS B.C.# 24932BK 2X.
3) ITEM #2 HAS (1) IDENTIFICATION MARK. MARK IS ON OUTSIDE OF PLATFORM.
4) ITEM #3 HAS (2) IDENTIFICATION MARKS. MARKS ARE ON OUTSIDE OF PLATFORM.
5) FINAL ASSEMBLY IS NEEDED ONCE ATTACHED TO THE PLATFORM.
6) **ITEM NOT SHOWN COMPLETE
7) *NOT SHOWN

| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| 37 | 1 | 949-0333RN | LINK-PLATFORM/VERT CHANNEL |
| 36 | 1 | 949-0333FN | LINK-PLATFORM/VERT CHANNEL |
| 35 | 2 | 975-2334 | PIN-BEARING-GEAR RACK |
| 34 | 2 | 12463 | BOLT-3/8-16 X 3/4 GR5-HEX/AUTO-BK |
| 33 | 4 | 10069BK | WASHER-3/8" LOCK/AUTO-BK |
| 32 | 2 | 975-2202 | PIN-BEARING-GEAR RACK |
| 31 | 8 | 29378 | WASHER-THRUST-1.125 OD/.625 ID/.0585T |
| 30 | 4 | 975-2359 | BEARING-PLATFORM-SLIDE |
| 29 | 2 | 975-2329BKN | GEAR RACK-PLATFORM FOLD |
| 28 | 4 | 13273 | RING-1/2 EXT SELF LOCK SNAP/AUTO-BK |
| 27 | 2 | 11563 | SCREW-1/4-20 X 1/4 SET CUP PT |
| 26 | 2 | 975-2360 | PIN-BEARING-PLATFORM SLIDE |
| 25 | 2 | 975-2358 | BEARING-PLATFORM-SLIDE |
| 24 | 1 | 32831 | GAS SPRING-6.46 EXT 4.88 COM P1=40# |
| 23 | 2 | 10058 | NUT-5/16-18 HEX/AUTO-BK |
| 22 | 2 | 10013 | BOLT-5/16-18 X 1" HEX HD. CAP |
| 21 | 2 | 40-1092-0 | SCREW-10-32 X 1.25" SHCS |
| 20 | 2 | 32759 | STANDOFF-FOOT MOUNT |
| 19 | 4 | 28031 | BEARING-FLANGE-1 X 1/2-16FDU08 |
| 18 | 4 | 25371 | BOLT-1/4-20 X 3/4" BHCS NYLK/BKZN |
| 17 | 1 | 34122F | BRACKET-ADJUST-SPLIT FOOT |
| 16 | 1 | 34122R | BRACKET-ADJUST-SPLIT FOOT |
| 15 | 2 | 18663 | SCREW-1/2-20 X 1.5" SET-LOCK/AUTO-BK |
| 14 | 4 | 17192P | SCREW-#10-32 X 1/2" FHDHXS w/PATCH/AUTO-BK |
| 13 | 4 | 990-0341 | ADAPT-CYL/ROLL STOP LEVER-OUT |
| 12 | 4 | 13889 | RING-1/2" EXT SELF LOCK SNAP/AUTO-BK |
| 11 | 2 | 945-2336N | BEARING-PLATFORM SLIDE |
| 10 | 8 | 24028 | BEARING-PLASTIC-FLANGE-3/8"ID X 1/4" |
| 9 | 1 | 35127 | GAS SPRING-25LB-3.228" X 9.488" |
| 8 | 2 | 24932BK | PIN-CLEVIS 3/8" X 3" EFF LEN.-W/O HOLE/BK |
| 7 | 10 | 29371 | WASHER-THRUST-.875 OD/.50 ID/.0585T |
| 6 | 1 | 949-0200W-27 | WMT-ROLL STOP ACTIVATION FOOT |
| 5 | 2 | 28324BK | NUT-5/16-18 TOP LOCK/AUTO-BK |
| 4 | 2 | 81003-000 | BOLT-5/16-18 X 1 1/4"-SHCS-BK ZN |
| 3 | 1 | 949-0311FN | STOP-PLATFORM |
| 2 | 1 | 949-0311RN | STOP-PLATFORM |
| 1 | 1 | 949-02740W** | WMT - PLATFORM FIXED INNER |

| ITEM | QTY. | PART NO. | DESCRIPTION |
|---|---|---|---|
| | | | |
| 73 | 2 | 30236R035.5* | DECAL-BOUNDRY YELLOW LEXAN 1" X 35.5" |
| 72 | 1 | 30236R025.5* | DECAL-BOUNDRY YELLOW LEXAN 1" X 25.5" |
| 71 | 4 | 24442 | BEARING-FLANGE-1/2" X 1/4"-08FDU04 |
| 70 | 4 | 20926 | NUT-3/8-16 UNC HEX LOCK JAMB |
| 69 | 4 | 10064 | WASHER-3/8" FLAT/AUTO-BK |
| 68 | 4 | 25171 | BOLT-5/16-18 X 2" FLBHSCS-GD8 |
| 67 | 2 | 33603 | BUMPER-1" X 5/8" LG NATURAL UHMW BRIDGEPLATE |
| 66 | 2 | 991-0404 | LEVER-IB |
| 65 | 2 | 10001 | BOLT-1/4-20 X 1" HEX |
| 64 | 1 | V955-0431RW | WMT-BKT-BRIDGE PLATE/REAR |
| 63 | 1 | 949-0431FNW | WMT-BKT-BRIDGE PLATE |
| 62 | 3 | 916-5406 | BEARING-UHMW FLAT-THIN-BLK |
| 61 | 2 | 25336 | WASHER-.516ID X .75OD X .0250/AUTO-BK |
| 60 | 2 | 24012 | BEARING-FLANGE-3/4" X 1/4"-12FDU04 |
| 59 | 2 | 34248 | PIVOT-ROLL STOP LEVER-NVL-2 |
| 58 | 2 | 34249 | WASHER-0.625"ID X 1"OD X 0.1 88"TH,DERIN |
| 57 | 1 | V991-0147-27Y | BRIDGE PLATE (V991-0147A27Y INCL. (28, 38, 57, 60-71) |
| 56 | 1 | 995-032840RRABKN | GEAR ASSEMBLY/REAR |
| 55 | 1 | 995-032840FRABKN | GEAR ASSEMBLY/FRONT |
| 54 | 1 | 949-02740OTW** | PLATFORM WELDMENT MOVABLE/OUTER |
| 53 | 4 | 10775 | NUT-1/4-20 HEX LOCK/AUTO-BK |
| 52 | 4 | 40-4230-0 | SCREW-1/4"-20 HEX LOCK/AUTO-BK |
| 51 | 1 | 945-4206FN | LATCH-ROLL STOP/FRONT |
| 50 | 1 | 945-4206RN | LATCH-ROLL STOP - REAR |
| 49 | 1 | 945-3202FN | BKT-LATCH-ROLL STOP-FRONT |
| 48 | 1 | 945-3202RN | BKT-LATCH-ROLL STOP-REAR |
| 47 | 2 | 35909 | COVER-VL GEAR OPENING |
| 46 | 4 | 11513 | RIV-POP-SD64BS-3/16"-.13/.25/AUTO-BK |
| 45 | 2 | 36003 | HAIRPIN COTTER 3/16-1/4 X 5/16 - .042 SS |
| 44 | 2 | 34686 | PIN-ROLLSTOP GAS SPRING |
| 43 | 1 | 949-0312A27Y | ASSY-ROLL STOP w/RUBBER/-2 |
| 42 | 2 | 10025 | BOLT-3/8-16 X 1" HEX/AUTO-BK |
| 41 | 2 | 26281 | SCREW-5/16-18 X 1/2" BHSC-BLK/AUTO-BK |
| 40 | 2 | 16368 | WASHER 5/16" EXTERNAL TOOTH |
| 39 | 2 | 26154 | BUMPER-STOW/VISTA |
| 38 | 2 | 14614Z | NUT-1/4-20 NYLOCK-ZINC |

# Decals and Antiskid

WARNING
Replace missing, worn or illegible decals. Failure to do so may result in serious bodily injury and/or property damage.

Notice: Clean surfaces with isopropyl alcohol before decal or antiskid application. Use a clean cloth or paper towels. Do not use oily shop rags. Wipe surface free of residue with dry portion of cleaning cloth.

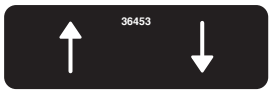
## Antiskid

| Antiskid | | |
|---|---|---|
| **Size** | **Color** | **Part No.** |
| 51 mm x 305 mm (2" x 12") | Black | 24172-BK |
| 76 mm x 305 mm (3" x 12") | Black | 24173-BK |
| 76 mm x 203 mm (3" x 8") | Black | 31188-BK |
| 152 mm x 203 mm (6" x 8") | Black | 28311-BK |
| 152 mm x 254 mm (6" x 10") | Black | 32038-BK |
| 152 mm x 305 mm (6" x 12") | Black | 24174-BK |

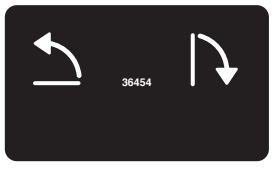
## Decals

WARNING
Lift installation and servicing procedures must be performed by authorized personnel only. Failure to follow this policy may result in serious bodily injury and/or property damage.
MADE IN AMERICA
Quality inspected
By:
37591

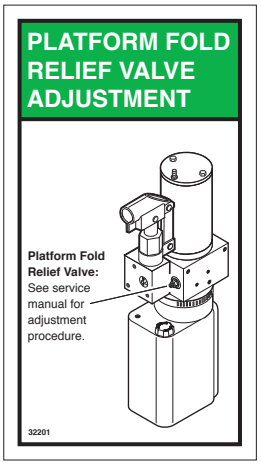
37591
Decal, Warn, Instl/Serv &
QC Insp, Intl, CE
(70 mm x 92 mm - 2.75" x 3.613")




36453
Decal, Up/Down Pendant Rocker
(35 mm x 11 mm - 1.375" x .8125")




36454
Decal, Fold/Unfold Pendant Rocker
(35 mm x 11 mm - 1.375" x .8125")



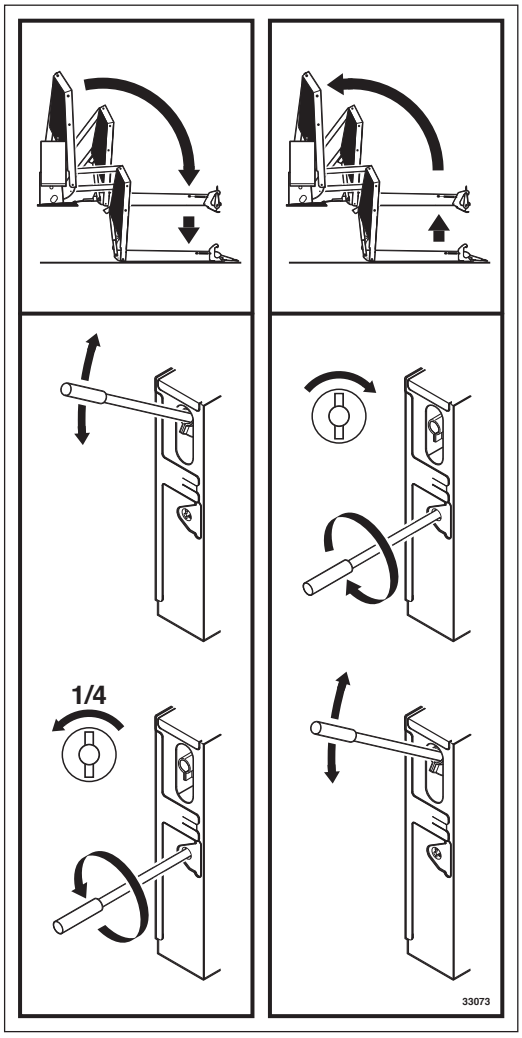

32201
Decal, Dual Relief Adjustment
(44 mm x 80 mm - 2" x 3")

(2 Sizes Available)

24369-10
Decal, Stripes, Yellow & Black Lexan
(38 mm x 254 mm - 1.5" x 10")

24369-12
Decal, Stripes, Yellow & Black Lexan
(38 mm x 305 mm - 1.5" x 12")

# Decals and Antiskid



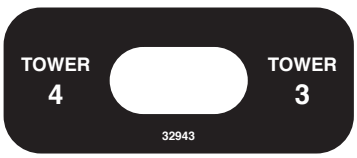

33073
Decal, Manual OP-INTL Public DPA-Pictoral
(90 mm x 181 mm - 3.563" x 7.125")

37588
Decal, Authorized Rep,
Autoadapt, Intl, CE
(51 mm x 80 mm - 2" x 3.15")

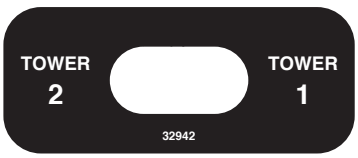
32094
Decal, Reflector/Light Kit
(54 mm x 89 mm - 2.125" x 3.5")



30236R
Tape, Vinyl, Yellow
(25 mm - 1" Wide)

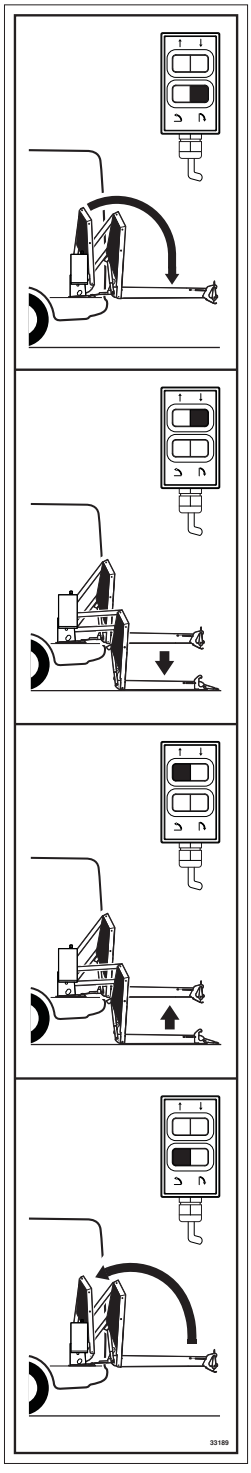



32943
Switch Label -
Tower 4 and Tower 3
(54 mm x 89 mm - 2.125" x 3.5")




32942
Switch Label -
Tower 2 and Tower 1
(54 mm x 89 mm - 2.125" x 3.5")

# Decals and Antiskid

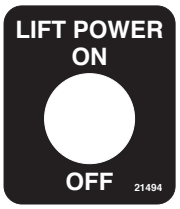



33189
Decal, Lift OP-Intl
Public DPA-Pictoral
(64 mm x 381 mm - 2.5" x 15")

36515
Decal, Label, Emergency Stop,
Intl, CE
(70 mm Dia. - 2.75" Dia.)

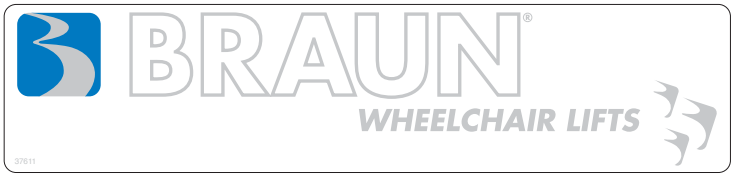
WARNING
Contact service representative before adjusting hydraulic pressure relief valve. Failure to do so may result in serious bodily injury and/or property damage.
37589

37589
Decal, Warn, Hydraulic
Press Adj, Intl, CE
(50 mm x 53 mm - 1.96" x 2.08")



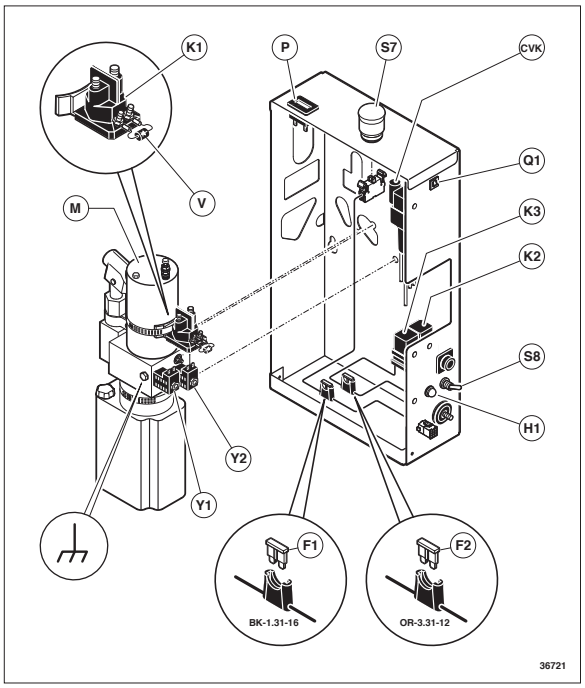

21494
Lift Power On/Off
(30mm x 35mm - 1.188" x 1.375")

37609
Decal, Logo,
Vista, Autoadapt
(56 mm x 235 mm - 2.188" x 9.25")

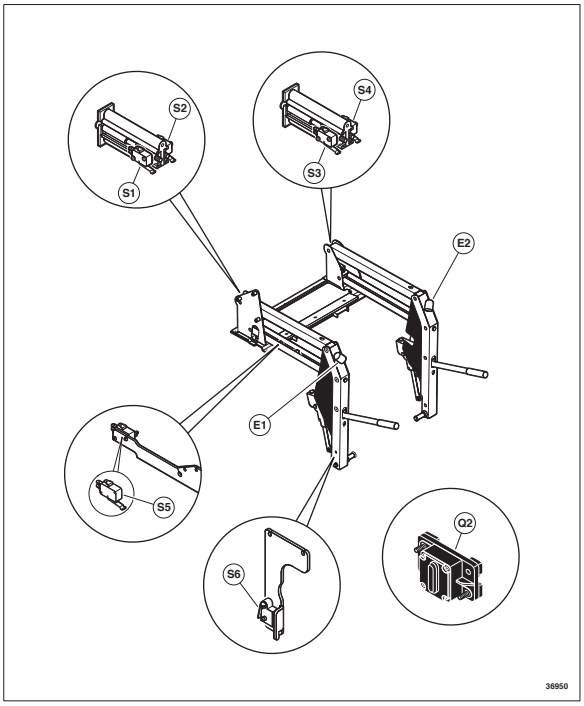



37611
Decal, Logo,
Side Plate, 1.75" Tall, Autoadapt
(192 mm x 44 mm - 7.563" x 1.75")

# Decals and Antiskid




36721
Decal, Electrical Components,
Module, Rear, CE, VL & CL, Public
(127 mm x 149 mm - 5" x 5.875")




36950
Decal, Electrical Components,
Lift, Rear, CE, 26 & 42 FTG, Public
(152 mm x 184 mm - 6" x 7.25")

36512
Decal, Hazard, Hot Lights,
DPA, Intl, Pictoral
(38 mm x 34 mm - 1.5" x 1.34")

36514
Decal, Hazard, Stay Clear,
Intl, Pictoral
(41 mm Dia. - 1.625" Dia.)

36513
Decal, Hazard, Electrical Shock,
Intl, Pictoral
(38 mm x 34 mm - 1.5" x 1.34")

| Fuse No. | Voltage | Amperage | SC I/R | Type | Size | |
|---|---|---|---|---|---|---|
| F1 | 32 VDC | 5 Ampere | 1000A @ 32VDC | FF | 0.75"L x 0.2"W x 0.488"H | 36645 |
| F2 | 32 VDC | 15 Ampere | 1000A @ 32VDC | FF | 0.75"L x 0.2"W x 0.488"H | |

36645
Decal, Fuse Specifications, Intl, DPA Public
(152 mm x 22 mm - 6" x .875")

THE BRAUN CORPORATION®

| EC Declaration of Conformity<br>With Council Directive 2006/42/EC CE | |
|---|---|
| Date of Issue: | 4 January 2012 |
| Directive: | Machinery Directive on machinery safety, 2006/42/EC |
| Conforming Machinery: | Dual Parallel Arm Hydraulic Lift System<br>Century -2, Millennium -2, Vista -2, GL Series 04 and newer,<br>GCL and GVL Series 05 and newer Lifts |
| Manufacturer: | Braun Corporation<br>631 West 11th Street<br>Winamac, IN 46996<br>USA |
| Authorized Representative: | Braun Corporation Authorized Representative<br><br>AUTOADAPT AB<br>Åkerivägen 7<br>S-443 61 Stenkullen<br>SWEDEN<br>Telephone: +46 (0) 302 254 00<br>E-mail: contact@autoadapt.se<br><br>AUTOADAPT UK LTD<br>Unit 1, Windsor Industrial Estate, Rupert Street<br>Aston, Birmingham B7 4PR, UK<br>Phone: +44 (0) 121 33 35 170<br>E-mail: contact@autoadapt.co.uk |
| Harmonized Standards Referenced or Applied: | BS EN 13857:2008, BS EN ISO 13850:2008,<br>EN ISO 14121-1:2007, BS EN 349:1993+A1:2008,<br>BS EN 953:1997+A1:2009, BS EN 1037:1995+A1:2008,<br>BS EN 982:1996+A1:2008, BS EN 614-1:2006+A1:2009,<br>EN 60204-1:2006, BS EN 1756-2:2004+A1:2009 |
| Specifications with which Conformity is Declared: | Essential Health and Safety Requirements of Annex 1 of the Machinery Directive |
| We hereby certify that the machinery described above conforms with the essential health and safety requirements of Council Directive 2006/42/EC on the approximation of the laws of the Member States relating to the safety of machinery. | |
| Technical File Reference Number | SF10933A1.BC |

Notes on Declared Standards referenced in the Declaration.

| | |
|---|---|
| BS EN 13857:2008 | Safety of machinery. Safety distances to prevent hazard zones being reached by upper and lower limbs. |
| BS EN ISO 13850:2008 | Safety of machinery - Emergency stop - Principles for design. |
| EN ISO 14121-1:2007 | Safety of machinery - Risk assessment - Part 1: Principles. |
| BS EN 349:1993+A1:2008 | Safety of machinery. Minimum gaps to avoid crushing of parts of the human body. |
| BS EN 953:1997+A1:2009 | Safety of machinery. Guards. General requirements for the design and construction of fixed and moveable parts. |
| BS EN 1037:1995+A1:2008 | Safety of machinery. Prevention of unexpected start-up. |
| BS EN 982:1996+A1:2008 | Safety of machinery. Safety requirements for fluid power systems and their components. Hydraulics. |
| BS EN 614-1:2006+A1:2009 | Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles. |
| EN 60204-1:2006 | Safety of machinery. Electrical equipment of machines. General requirements. |
| BS EN 1756-2:2004+A1:2009 | Tail Lifts-Platform lifts for mounting on wheeled vehicles-Safety Requirements-Part 2: Tail lifts for passengers. |

# Declaration of Noise Emission

The Braun Corporation Vista -2 International Series System Sound Pressure Levels per EN ISO 11202 as based on testing on similar models are as follows:

| | Operating | Idle |
|---|---|---|
| ***LpAm*** (Operator Position) | 75 dB (A) | 68 dB (A) |
| ***LpAm*** (Bystander Position) | 73 dB (A) | 69 dB (A) |

Ambient Correction Factor K3A calculated according to EN ISO 11204 Appendix A. 4 dB (A)

Measurements were made at a height of 1.5 m and 1 m from the Operator Position and Bystander positions.

The difference between the extraneous noise level and the sound intensity level at each measuring point is: ***LpAm* Δ** = 6 dB (A)

The figures quoted are emission levels and are not necessarily safe working levels. While there is a correlation between the emission and exposure levels this cannot be used reliably to determine whether or not further precautions are required.

Factors that influence the actual level of exposure of the workforce include characteristics of the work room, the other sources of noise, etc. such as the number of machines and other adjacent processes. Also, the permissible level of exposure can vary from country to country.

This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.

Braun Corporation
631 W. 11th Street
Winamac, IN 46996
USA

CE

THE BRAUN CORPORATION®

| Declaration of Conformity<br>With Directive 2004/108/EC CE | |
|---|---|
| Date of Issue: | 4 January 2012 |
| Directive: | Radio Interference of Vehicles 2004/108/EC |
| Conforming Machinery: | Dual Parallel Arm Hydraulic Lift System<br>Century -2, Millennium -2, Vista -2, VL998, GL Series 04 and newer, GCL and GVL Series 05 and newer Lifts |
| Manufacturer: | Braun Corporation<br>631 West 11th Street<br>Winamac, IN 46996<br>USA |
| Authorized Representative: | Braun Corporation Authorized Representative<br><br>AUTOADAPT AB<br>Åkerivägen 7<br>S-443 61 Stenkullen<br>SWEDEN<br>Telephone: +46 (0) 302 254 00<br>E-mail: contact@autoadapt.se<br><br>AUTOADAPT UK LTD<br>Unit 1, Windsor Industrial Estate, Rupert Street<br>Aston, Birmingham B7 4PR, UK<br>Phone: +44 (0) 121 33 35 170<br>E-mail: contact@autoadapt.co.uk |
| Harmonized Standards Referenced or Applied: | EN50498:2010 |
| We hereby certify that the machinery described above conforms with Directive 2004/108/EC | |
| Technical File Reference Number | SF10933A1.BC |

## NOTES

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# Service Manual

## International

# Vista 2

# Stacking Platform

## Public Use

### Wheelchair Lifts

## Series AB

# 26" FTG

**Braun Limited Warranty**

Consult your local Braun dealer regarding warranty policy.

www.braunlift.com/international

**Patent #5,261,779**

**Patent #6,238,169**

**Patent #6,464,447**

**Patent #6,599,079**

**Patent #6,692,217**

**Patent #7,306,422**

**Patent #7,422,408**

**Patent #7,441,995**

**Patent #7,530,226**

**Patent #CA 2,335,081**

**37838**
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**2012**

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*All illustrations, descriptions and specifications in this manual are based on the latest product information available at the time of publication. The Braun Corporation reserves the right to make changes at any time without notice.*

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**Original Instructions**

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